

Annex K5
Phase III Experiments

This page intentionally left blank

Table 1 Phase III Agonist Range Finder Plates Tested at XDS

Experiment I.D.	Date	Induction ¹	DMSO	Was Plate Used for Data Analysis?	Reason Why Plate Was Not Used
XPIIX0041X0040X0039X0035 X0034X0032AGRF_053009	30-May-09	4.78	831	Yes	
XPIIX0042X0031X0030X0029 X0028X0026AGRF_053009	30-May-09	3.62	1012	Yes	
XPIIX0043X0044X0045X0046 X0047X0048AGRF_053009	30-May-09	6.22	578	Yes	
XPIIX0049X0050X0051X0053 X0054X0057AGRF_053009	30-May-09	3.94	1003	Yes	
XPIIX0058X0059X0061X0062 X0063X0064AGRF_053009	30-May-09	3.97	894	Yes	
XPIIX0036X0033X0027X0025 X0122X0123AGRF081309	13-Aug-09	2.56	1240	No	Failed Induction
XPIIX0036X0033X0027X0025 X0122X0123AGRF081509	15-Aug-09	5.47	937	Yes	
XPIIX0060X0056X0055X0052 X0038X0037AGRF081509	15-Aug-09	10.31	628	Yes	
XPIIX0065X0120X0119AGRF 082109	21-Aug-09	3.52	1311	Yes	

¹ Induction for range finder plates is measured by dividing the averaged highest E2 reference standard RLU value by the averaged DMSO control RLU value.

Table 2 Phase III Agonist Range Finder Plates Tested at ECVAM

Experiment I.D.	Date	Induction ¹	DMSO	Was Plate Used for Data Analysis?	Reason Why Plate Was Not Used
AgRf PLATEI	18-Mar-09	12.98	1497	Yes	
AgRfPLATEII	18-Mar-09	16.00	1166	Yes	
AgRfPLATEIII	18-Mar-09	10.82	1884	Yes	
AgRfPLATEIV	18-Mar-09	10.54	1490	Yes	
AgRf 060509	06-May-09	14.88	1151	Yes	
AgRf PLATE V	21-Oct-09	13.35	1816	Yes	
AgRf PLATE VI	21-Oct-09	9.64	2868	Yes	
Ag Rf II PLATE II	31-Mar-09	13.45	1412	Yes	
Ag Rf II PLATE III	31-Mar-09	10.58	2453	Yes	
Ag Rf II PLATE IV	31-Mar-09	10.10	2359	Yes	

¹ Induction for range finder plates is measured by dividing the averaged highest E2 reference standard RLU value by the averaged DMSO control RLU value.

Table 3 Phase III Agonist Range Finder Plates Tested at Hiyoshi

Experiment I.D.	Date	Induction ¹	DMSO	Was Plate Used for Data Analysis	Reason Why Plate Was Not Used
AgRFAG-1	22-Oct-08	6.44	1807	Yes	
AgRFAG-2	31-Jan-08	4.63	4718	Yes	
AgRFAG-3	25-Jan-09	4.78	4888	Yes	
AgRFAG-4	30-Jan-09	4.07	5145	Yes	
AgRFAG-5	30-Jan-09	4.07	5182	Yes	
AgRFAG-6	06-Feb-09	4.06	3711	Yes	
AgRFAG-7	14-Feb-09	3.11	6138	Yes	
AgRFAG-8	20-Feb-09	4.56	4075	Yes	

¹ Induction for range finder plates is measured by dividing the averaged highest E2 reference standard RLU value by the averaged DMSO control RLU value.

Table 4 Phase III Antagonist Range Finder Plates Tested at XDS

Experiment I.D.	Date	Reduction ¹	DMSO	Was Plate Used for Data Analysis?	Reason Why Plate Was Not Used
XPIIX0069X0070X0071X0073X0074X0082ANTRF_052709	27-May-09	5.98	2184	Yes	
XPIIX0083X0086X0087X0089X0092X0101ANTRF_052709	27-May-09	6.38	2418	Yes	
XPIIX0084X0105X0104X0102X0099X0090ANTRF_052209	27-May-09	14.91	796	Yes	
XPIIX0085X0042X0080X0079X0078X0066ANTRF_052809	27-May-09	6.89	973	Yes	
XPIIX0103X0058X0097X0093X0088ANTRF_052809	27-May-09	9.36	697	Yes	
XPIIX0052X0090X0085X0084X0082X0077ANTRF0813094	13-Aug-09	1.88	2244	No	Failed Reduction
XPIIX0067X0147X0148X0144X0141X0138ANTRF081309	13-Aug-09	2.49	1746	No	Failed Reduction
XPIIX0105X0104X0100X0096X0055X0094ANTRF081309	13-Aug-09	1.82	2240	No	Failed Reduction
XPIIX0105X0104X0100X0096X0055X0094ANTRF081309	13-Aug-09	2.74	1668	No	Failed Reduction
XPIIX0052X0090X0085X0084X0082X0077ANTRF081509	15-Aug-09	7.12	1055	Yes	
XPIIX0067X0147X0148ANTRF081509	15-Aug-09	10.67	797	Yes	
XPIIX0076X0075X0073X0072X0070X0068ANTRF081309	15-Aug-09	6.57	1302	Yes	
XPIIX0105X0104X0100X0096X0055X0094ANTRF081509	15-Aug-09	7.63	901	Yes	
XPIIX0065X0148X0145X0144X0141X0138ANTRF082109	21-Aug-09	3.79	1564	Yes	

¹ Reduction for range finder plates is measured by dividing the averaged highest Ral/E2 reference standard RLU value by the averaged DMSO control RLU value.

Table 5 Phase III Antagonist Range Finder Plates Tested at ECVAM

Experiment I.D.	Date	Reduction ¹	DMSO	Was Plate Used for Data Analysis?	Reason Why Plate Was Not Used
AntaRf PLATE I	21-Mar-09	10.40	1213	No	Experimenter error
AntRf2 PLATE I	25-Mar-09	8.52	2782	Yes	
AntaRf PLATE II	21-Mar-09	7.73	5296	Yes	
AntaRf PLATE III	21-Mar-09	9.78	4087	Yes	
AntaRF PLATE IV	21-Mar-09	11.78	3891	Yes	
Anta RF PLATE V	28-Oct-09	11.74	2243	Yes	
Anta RF PLATE VI	28-Oct-09	9.25	2719	Yes	
Anta RF PLATE VII	11-Nov-09	8.04	3150	Yes	

¹ Reduction for range finder plates is measured by dividing the averaged highest Ral/E2 reference standard RLU value by the averaged DMSO control RLU value.

Table 6 Phase III Antagonist Range Finder Plates Tested at Hiyoshi

Experiment I.D.	Date	Reduction ¹	DMSO	Was Plate Used for Data Analysis	Reason Why Plate Was Not Used
AntRFAnt-1	22-Oct-08	7.97	2288	Yes	
AntRFAnt-2	22-Oct-08	7.38	4089	Yes	
AntRFAnt-3	25-Jan-09	6.99	6009	Yes	
AntRFAnt-4	30-Jan-09	6.41	6574	Yes	
AntRFAnt-5	30-Jan-09	6.03	5905	Yes	
AntRFAnt-6	06-Feb-09	6.46	3746	Yes	
AntRFAnt-7	14-Feb-09	3.96	7067	Yes	
AntRFAnt-8	20-Feb-09	7.14	3869	Yes	

¹ Reduction for range finder plates is measured by dividing the averaged highest Ral/E2 reference standard RLU value by the averaged DMSO control RLU value.

Table 7 Phase III Agonist Comprehensive Test Plates Tested at XDS

Test Substance	Date	DMSO	Induction ¹	E2 Reference Standard EC ₅₀ (µg/mL)	MET	Test Substance Dilution	Test Substance EC ₅₀ (µg/mL)	Was Plate Used for Data Analysis?	Reason Why Plate Was Not Used	Experiment I.D.
ACTD	04-Dec-09	1909	3.80	3.01 x 10 ⁻⁶	5294	1:2	Positive but an EC ₅₀ value could not be calculated	Yes	Looks like an antagonist curve/ experimenter error	2009-12-04XPIIIAgCTX0035X0055
ACTD	19-Aug-09	1536	3.56	6.23 x 10 ⁻⁷	8578	1:5	Negative	Yes	Experimenter error	XPIII0055X0052AGCT081309
ACTD	09-Sep-09	18324	1.18	Positive but an EC ₅₀ value could not be calculated	1179	1:2	Positive but an EC ₅₀ value could not be calculated	No	Failed DMSO, E2 reference standard, induction, and METcontrol	XPIII0055X0065AgCT09SEP09
ANDRO	19-Aug-09	1656	4.07	3.39 x 10 ⁻⁶	8040	1:2	Positive but an EC ₅₀ value could not be calculated	Yes		XPIII0056X0060AGCT081309
API	18-Aug-09	897	5.35	3.07 x 10 ⁻⁶	5258	1:5	7.40 x 10 ⁻¹	Yes		XPIII0051X0054AGCT081809
CLOM	13-Aug-09	1104	4.75	3.53 x 10 ⁻⁶	6170	1:5	Positive but an EC ₅₀ value could not be calculated	Yes		XPIII0059X0053AGCT081309
COU	01-Dec-09	2056	4.56	1.05 x 10 ⁻⁶	7454	1:5	6.44 x 10 ⁻⁷	Yes		2009-12-01XPIIIAgCTX0038X0052
COU	19-Aug-09	1536	3.56	6.23 x 10 ⁻⁷	8578	1:2	Positive but an EC ₅₀ value could not be calculated	Yes	Experimenter error	XPIII0055X0052AGCT081309
COU	09-Nov-09	2153	4.35	3.83 x 10 ⁻⁶	3193	1:5	Negative	Yes	Experimenter error	2009-11-09XPIIIAgCTTX0034X0052
CUM	13-Aug-09	1104	4.75	3.53 x 10 ⁻⁶	6170	1:2	5.57 x 10 ⁻²	Yes		XPIII0059X0053AGCT081309
DAI	18-Aug-09	897	5.35	3.07 x 10 ⁻⁶	5258	1:5	1.74 x 10 ⁻¹	Yes		XPIII0051X0054AGCT081809

Test Substance	Date	DMSO	Induction ¹	E2 Reference Standard EC ₅₀ (µg/mL)	MET	Test Substance Dilution	Test Substance EC ₅₀ (µg/mL)	Was Plate Used for Data Analysis?	Reason Why Plate Was Not Used	Experiment I.D.
DBA	11-Aug-09	920	3.82	2.08 x 10 ⁻⁶	6730	1:5	Positive but an EC ₅₀ value could not be calculated	Yes		XPIIX0047X004 8AGCT081109
DBP	18-Aug-09	511	5.84	2.80 x 10 ⁻⁶	9617	1:2	Positive, but an EC ₅₀ could not be calculated	Yes		XPIIX0049X005 0AGCT081809
DDE	01-Dec-09	1630	4.22	2.12 x 10 ⁻⁵	7410	1:5	1.15 x 10 ⁻⁵	Yes		2009-12- 01XPIIAGCTTX0 034X0033
DDE	29-Jul-09	3248	2.13	2.29 x 10 ⁻⁶	5315	1:2	1.77 x 10 ⁰	No	Failed induction	XPIIX0034X003 2AGCT072909
DDE	03-Aug-09	2316	5.91	1.76 x 10 ⁻⁶	8386	1:2	Positive but an EC ₅₀ value could not be calculated	Yes		XPIIX0034X003 2AGCT080309
DDE	09-Nov-09	2153	4.35	3.83 x 10 ⁻⁶	3193	1:5	Negative	Yes	Experimenter error	2009-11- 09XPIIAGCTTX0 034X0052
DEHP	11-Aug-09	866	3.70	2.87 x 10 ⁻⁶	6736	1:2	Positive but an EC ₅₀ value could not be calculated	Yes		XPIIX0045X004 6AGCT081109
DEX	18-Aug-09	511	5.84	2.80 x 10 ⁻⁶	9617	1:2	Positive, but an EC ₅₀ could not be calculated	Yes		XPIIX0049X005 0AGCT081809
DHT	19-Aug-09	1656	4.07	3.39 x 10 ⁻⁶	8040	1:5	Positive but an EC ₅₀ value could not be calculated	Yes		XPIIX0056X006 0AGCT081309
DIC	11-Aug-09	920	3.82	2.08 x 10 ⁻⁶	6730	1:2	8.23 x 10 ⁻¹	Yes		XPIIX0047X004 8AGCT081109
E1	03-Sep-09	1067	4.14	9.50 x 10 ⁻⁶	7679	1:5	Positive but an EC ₅₀ value could not be calculated	No	Failed E2 reference standard	XPIIX0063X006 4AGCT03Sep09
E1	09-Sep-09	6189	6.27	1.84 x 10 ⁻⁶	6064	1:5	1.32 x 10 ⁻⁶	Yes		XPIIX0063X006 4AGCT09Sep09

Test Substance	Date	DMSO	Induction ¹	E2 Reference Standard EC ₅₀ (µg/mL)	MET	Test Substance Dilution	Test Substance EC ₅₀ (µg/mL)	Was Plate Used for Data Analysis?	Reason Why Plate Was Not Used	Experiment I.D.
E2	03-Sep-09	1067	4.14	9.50 x 10 ⁻⁶	7679	1:5	Positive but an EC ₅₀ value could not be calculated	No	Failed E2 reference standard	XPIIX0063X0064AGCT03Sep09
E2	09-Sep-09	6189	6.27	1.84 x 10 ⁻⁶	6064	1:5	3.64 x 10 ⁻⁶	Yes		XPIIX0063X0064AGCT09Sep09
EPB	08-Aug-09	1774	3.32	3.74 x 10 ⁻⁶	8346	1:5	Positive but an EC ₅₀ value could not be calculated	Yes		XPIIX0043X0044AGCT080809
EST	11-Aug-09	866	3.70	2.87 x 10 ⁻⁶	6736	1:5	9.52 x 10 ⁻⁵	Yes		XPIIX0045X0046AGCT081109
FLO	08-Aug-09	1774	3.32	3.74 x 10 ⁻⁶	8346	1:2	4.10 x 10 ⁰	Yes		XPIIX0043X0044AGCT080809
HEX	29-Jul-09	3298	2.13	2.54 x 10 ⁻⁶	6029	1:5	4.37 x 10 ⁻⁶	No	Failed induction	XPIIX0039X0035AGCT072909
HEX	03-Aug-09	932	6.22	2.40 x 10 ⁻⁶	6632	1:5	6.37 x 10 ⁻⁶	Yes		XPIIX0039X0035AGCT080309
HFLUT	04-Dec-09	2212	3.29	2.51 x 10 ⁻⁶	5804	1:5	Negative	Yes		2009-12-04XPIIAGCTX0031X0042
HFLUT	29-Jul-09	3196	2.11	2.40 x 10 ⁻⁶	6297	1:5	Negative	No	Failed induction	XPIIX0042X0031AGCT072909
HFLUT	05-Aug-09	923	3.58	8.74 x 10 ⁻⁶	5932	1:5	Positive but an EC ₅₀ value could not be calculated	Yes		XPIIX0042X0031AGCT080509
HFLUT	09-Sep-09	6508	2.80	4.93 x 10 ⁻⁴	6553	1:5	Positive but an EC ₅₀ value could not be calculated	No	Failed induction	XPIIX0038X0042AGCT09SEPT09
HFLUT	09-Nov-09	3083	2.93	7.60 x 10 ⁻⁶	5901	1:5	Positive, but an EC ₅₀ value could not be calculated	No	Failed induction	2009-11-09XPIIAGCTTX0038X0042
HFLUT	16-Nov-09	4160	3.31	2.63 x 10 ⁻⁶	7017	1:5	Positive, but an EC ₅₀ value could not be calculated	Yes	Experimenter error	2009-11-16XPIIAGCTTX0038X0042

Test Substance	Date	DMSO	Induction ¹	E2 Reference Standard EC ₅₀ (µg/mL)	MET	Test Substance Dilution	Test Substance EC ₅₀ (µg/mL)	Was Plate Used for Data Analysis?	Reason Why Plate Was Not Used	Experiment I.D.
KEP	29-Jul-09	2794	2.20	2.61 x 10 ⁻⁶	5997	1:5	Positive but an EC ₅₀ value could not be calculated	No	Failed induction	XPIIX0041X0040AGCT072909
KEP	03-Aug-09	914	6.30	3.10 x 10 ⁻⁶	6469	1:5	4.51 x 10 ⁻¹	Yes		XPIIX0041X0040AGCT080309
KMP	29-Jul-09	2794	2.20	2.61 x 10 ⁻⁶	5997	1:5	9.56 x 10 ⁻²	No	Failed induction	XPIIX0041X0040AGCT072909
KMP	03-Aug-09	914	6.30	3.10 x 10 ⁻⁶	6469	1:5	2.19 x 10 ⁰	Yes		XPIIX0041X0040AGCT080309
MET	04-Dec-09	1909	3.80	3.01 x 10 ⁻⁶	5294	1:5	9.95 x 10 ⁻¹	Yes		2009-12-04XPIIIAgCTX0035X0055
MET	29-Jul-09	3298	2.13	2.54 x 10 ⁻⁶	6029	1:2	1.13 x 10 ⁰	No	Failed Induction	XPIIX0039X0035AGCT072909
MET	03-Aug-09	932	6.22	2.40 x 10 ⁻⁶	6632	1:2	Positive but an EC ₅₀ value could not be calculated	Yes		XPIIX0039X0035AGCT080309
MET	09-Nov-09	2138	4.00	2.95 x 10 ⁻⁶	6189	1:5	Positive, but an EC ₅₀ value could not be calculated	Yes	Experimenter error	2009-11-10XPIIIAgCCTX0035X0030
MOR	24-Aug-09	2278	3.15	1.86 x 10 ⁻⁶	7152	1:5	7.92x 10 ⁰	Yes		XPIIX0038X0037AGCT082409
MOR	10-Sep-09	5349	4.54	7.10 x 10 ⁻⁶	5598	1:5	Negative	Yes	Experimenter error	XPIIX0031X0037AGCT09Sep09
MTEST	01-Dec-09	2763	3.02	3.88 x 10 ⁻⁶	6409	1:5	2.32 x 10 ⁻¹	Yes		2009-12-01XPIIIAgCCTX0065X0038
MTEST	01-Dec-09	2056	4.56	1.05 x 10 ⁻⁶	7454	1:5	9.97 x 10 ⁻⁴	Yes		2009-12-01XPIIIAgCTX0038X0052
MTEST	24-Aug-09	2278	3.15	1.86 x 10 ⁻⁶	7152	1:5	2.41 x 10 ⁻¹	Yes		XPIIX0038X0037AGCT082409

Test Substance	Date	DMSO	Induction ¹	E2 Reference Standard EC ₅₀ (µg/mL)	MET	Test Substance Dilution	Test Substance EC ₅₀ (µg/mL)	Was Plate Used for Data Analysis?	Reason Why Plate Was Not Used	Experiment I.D.
MTEST	09-Sep-09	6508	2.80	4.93 x 10 ⁻⁴	6553	1:5	Positive but an EC ₅₀ value could not be calculated	No	Failed induction	XPIIIx0038X0042 AGCT09SEPT09
MTEST	09-Nov-09	3083	2.93	7.60 x 10 ⁻⁶	5901	1:5	Positive, but an EC ₅₀ value could not be calculated	No	Failed induction	2009-11-09XPIIIAgCTTX0 038X0042
MTEST	16-Nov-09	4160	3.31	2.63 x 10 ⁻⁶	7017	1:5	Positive, but an EC ₅₀ value could not be calculated	Yes	Experimenter error	2009-11-16XPIIIAgCTTX0 038X0042
NEN	01-Dec-09	3083	3.54	2.93 x 10 ⁻⁶	5933	1:5	5.69 x 10 ⁻⁴	Yes		2009-12-01XPIIIAgCTTX0 036X0030
NEN	24-Aug-09	2225	3.29	2.51 x 10 ⁻⁶	6938	1:5	2.63 x 10 ⁻⁴	Yes		XPIIIx0033X003 6AGCT082409
NEN	11-Nov-09	7542	4.40	3.00 x 10 ⁻⁶	5448	1:5	1.90 x 10 ⁻²	No	Failed DMSO control	2009-11-11XPIIIAgCTTX0 033X0036
NEN	16-Nov-09	6476	5.50	2.50 x 10 ⁻⁶	4085	1:5	1.54 x 10 ⁻²	Yes	Experimenter error	2009-11-16 XPIIIAgCTTX003 3X0036
OCT	13-Aug-09	1315	3.98	3.32 x 10 ⁻⁶	4404	1:5	Positive but an EC ₅₀ value could not be calculated	Yes		XPIIIx0057X006 1AGCT081309
OHTAM	18-Aug-09	668	6.58	3.26 x 10 ⁻⁶	6333	1:2	Negative	Yes		XPIIIx0058X006 2AGCT081809
PBARB	01-Dec-09	1630	4.22	2.12 x 10 ⁻⁵	7410	1:5	Positive but an EC ₅₀ value could not be calculated	Yes		2009-12-01XPIIIAgCTTX0 034X0033
PBARB	24-Aug-09	2225	3.29	2.51 x 10 ⁻⁶	6938	1:2	Positive but an EC ₅₀ value could not be calculated	Yes		XPIIIx0033X003 6AGCT082409
PBARB	11-Nov-09	7542	4.40	3.00 x 10 ⁻⁶	5448	1:5	Positive, but an EC ₅₀ value could not be calculated	No	Failed DMSO control	2009-11-11XPIIIAgCTTX0 033X0036

Test Substance	Date	DMSO	Induction ¹	E2 Reference Standard EC ₅₀ (µg/mL)	MET	Test Substance Dilution	Test Substance EC ₅₀ (µg/mL)	Was Plate Used for Data Analysis?	Reason Why Plate Was Not Used	Experiment I.D.
PBARB	16-Nov-09	6476	5.50	2.50 x 10 ⁻⁶	4085	1:5	Negative	Yes	Experimenter error	2009-11-16 XPIIIAgCTTX003 3X0036
PPTH	29-Jul-09	3248	2.13	2.29 x 10 ⁻⁶	5315	1:5	1.62 x 10 ⁺¹	No	Failed induction	XPIII0034X003 2AGCT072909
PPTH	03-Aug-09	2316	5.91	1.76 x 10 ⁻⁶	8386	1:5	7.68 x 10 ⁰	Yes		XPIII0034X003 2AGCT080309
PROG	04-Dec-09	2212	3.29	2.51 x 10 ⁻⁶	5804	1:5	1.59 x 10 ⁰	Yes		2009-12- 04XPIIIAgCTX00 31X0042
PROG	29-Jul-09	3196	2.11	2.40 x 10 ⁻⁶	6297	1:2	4.41 x 10 ⁻¹	No	Failed induction	XPIII0042X003 1AGCT072909
PROG	05-Aug-09	923	3.58	8.74 x 10 ⁻⁶	5932	1:2	Positive but an EC ₅₀ value could not be calculated	Yes		XPIII0042X003 1AGCT080509
PROG	10-Sep-09	5349	4.54	7.10 x 10 ⁻⁶	5598	1:5	3.03 x 10 ⁺¹	Yes	Experimenter error	XPIII0031X003 7AGCT09Sep09
PTU	01-Dec-09	3083	3.54	2.93 x 10 ⁻⁶	5933	1:5	Positive but an EC ₅₀ value could not be calculated	Yes		2009-12- 01XPIIIAgCTTX0 036X0030
PTU	05-Aug-09	771	3.90	7.25 x 10 ⁻⁶	5051	1:2	Positive but an EC ₅₀ value could not be calculated	Yes		XPIII0030X002 9AGCT080509
PTU	09-Nov-09	2138	4.00	2.95 x 10 ⁻⁶	6189	1:5	Negative	Yes	Experimenter error	2009-11- 10XPIIIAgCTTX0 035X0030
Ral	05-Aug-09	771	3.90	7.25 x 10 ⁻⁶	5051	1:2	Negative	Yes		XPIII0030X002 9AGCT080509
RES	05-Aug-09	1024	2.59	6.53 x 10 ⁻⁶	5391	1:5	1.09 x 10 ⁰	No	Failed induction	XPIII0028X002 6AGCT080509
RES	08-Aug-09	1687	3.99	3.05 x 10 ⁻¹⁴	3996	1:5	9.07 x 10 ⁻¹	Yes		XPIII0028X002 6AGCT080809

Test Substance	Date	DMSO	Induction ¹	E2 Reference Standard EC ₅₀ (µg/mL)	MET	Test Substance Dilution	Test Substance EC ₅₀ (µg/mL)	Was Plate Used for Data Analysis?	Reason Why Plate Was Not Used	Experiment I.D.
SAZ	01-Dec-09	1759	4.56	2.20 x 10 ⁻⁶	6506	1:5	Positive but an EC ₅₀ value could not be calculated	Yes		2009-12-01XPIIIAgCTTX0025X0027
SAZ	04-Dec-09	1924	3.75	2.98 x 10 ⁻⁶	5017	1:5	Negative	Yes		2009-12-04XPIIIAgCTX0027X0025
SAZ	24-Aug-09	2146	3.51	3.98 x 10 ⁻⁶	6627	1:2	Positive but an EC ₅₀ value could not be calculated	Yes		XPIII0025X0027AGCT082409
SAZ	11-Nov-09	6826	4.31	2.56 x 10 ⁻⁶	5380	1:5	Negative	Yes	Experimenter error	2009-11-11XPIIIAgCTTX0025X0027
SBP	13-Aug-09	1315	3.98	3.32 x 10 ⁻⁶	4404	1:5	1.77 x 10 ⁻⁴	Yes		XPIII0057X0061AGCT081309
TAM	05-Aug-09	1024	2.59	6.53 x 10 ⁻⁶	5391	1:5	Positive but an EC ₅₀ value could not be calculated	No	Failed induction	XPIII0028X0026AGCT080509
TAM	08-Aug-09	1687	3.99	3.05 x 10 ⁻¹⁴	3996	1:5	Positive but an EC ₅₀ value could not be calculated	Yes		XPIII0028X0026AGCT080809
TCPA	18-Aug-09	668	6.58	3.26 x 10 ⁻⁶	6333	1:5	Positive but an EC ₅₀ value could not be calculated	Yes		XPIII0058X0062AGCT081809
TEST	01-Dec-09	1759	4.56	2.20 x 10 ⁻⁶	6506	1:5	1.82 x 10 ⁻²	Yes		2009-12-01XPIIIAgCTTX0025X0027
TEST	04-Dec-09	1924	3.75	2.98 x 10 ⁻⁶	5017	1:5	7.39 x 10 ⁻²	Yes		2009-12-04XPIIIAgCTX0027X0025
TEST	24-Aug-09	2146	3.51	3.98 x 10 ⁻⁶	6627	1:5	3.30 x 10 ⁻¹	Yes		XPIII0025X0027AGCT082409
TEST	11-Nov-09	6826	4.31	2.56 x 10 ⁻⁶	5380	1:5	7.52 x 10 ⁺²	Yes	Experimenter error	2009-11-11XPIIIAgCTTX0025X0027

Test Substance	Date	DMSO	Induction ¹	E2 Reference Standard EC ₅₀ (µg/mL)	MET	Test Substance Dilution	Test Substance EC ₅₀ (µg/mL)	Was Plate Used for Data Analysis?	Reason Why Plate Was Not Used	Experiment I.D.
TPA	01-Dec-09	2763	3.02	3.88 x 10 ⁻⁶	6409	1:2	Positive but an EC ₅₀ value could not be calculated	Yes		2009-12-01XPIIIAgCTTX0065X0038
TPA	03-Sep-09	1100	4.61	1.13 x 10 ⁻⁵	6052	1:2	Positive but an EC ₅₀ value could not be calculated	No	Failed E2 reference standard	XPIII0065AGC T03Sep09
TPA	09-Sep-09	18324	1.18	Positive but an EC ₅₀ value could not be calculated	1179	1:2	Negative	No	Failed DMSO, E2 reference standard, induction, and methoxychlor control	XPIII0055X0065 AgCT09SEP09
TPA	12-Nov-09	7749	5.46	2.50 x 10 ⁻⁶	4458	1:2	Positive, but an EC ₅₀ value could not be calculated	No	Failed DMSO control	2009-11-12XPIII-IVAgCTTX0065X0108
TPA	16-Nov-09	4899	3.69	2.48 x 10 ⁻⁶	6663	1:2	Negative	Yes	Experimenter error	2009-11-16XPIVAgCTTX0065X0128

Abbreviations: ACTD = Actinomycin D; ANDRO = 4-androstenedione; API = Apigenin; CLOM = Clomiphene citrate; COU = Coumestrol; CUM = 4-cumylphenol; DAI = Daidzein; DBA = Dibenzo[*a,h*]anthracene; DBP = Di-*n*-butyl phthalate; DDE = *p,p'*-DDE; DEHP = Diethylhexyl phthalate; DEX = Dexamethasone; DHT = 5 α -dihydrotestosterone; DIC = Dicofol; DMSO = Dimethyl sulfoxide; E1 = 17 α -estradiol; E2 = 17 β -estradiol; EC₅₀ = half maximal effective concentration; EPB = Ethyl paraben; EST = Estrone; FLO = Fluoranthene; HEX = *meso*-hexestrol; HFLUT = Hydroxyflutamide; I.D. = Identification; KEP = Kepone; KMP = Kaempferol; MET = *p,p'*-methoxychlor; MOR = Morin; MTEST = Methyl testosterone; NEN = Norethynodrel; OCT = 4-*tert*-octylphenol; OHTAM = 4-hydroxytamoxifen; PBARB = Phenobarbital; PPTH = Phenolphthalin; PROG = Progesterone; PTU = Propylthiouracil; Ral = Raloxifene HCl; RES = Resveratrol; SAZ = Sodium azide; SBP = 2-*sec*-butylphenol; TAM = Tamoxifen; TCPA = 2,4,5-trichlorophenoxyacetic acid; TEST = Testosterone; TPA = 12 - *O* -Tetradecanoylphorbol-13-acetate

¹ Induction for comprehensive test plates is measured by dividing the averaged highest E2 reference standard RLU value by the averaged DMSO control RLU value.

Table 8 Phase III Antagonist Plates Tested at XDS

Test Substance	Date	DMSO	Reduction ¹	Ral/E2 Reference Standard IC ₅₀ (µg/mL)	E2 Cont	Fla\E2 Cont	Test Substance Dilution	Test Substance IC ₅₀ (µg/mL)	Was Plate Used for Data Analysis?	Reason Why Plate Was Not Used	Experiment I.D.
ACTD	19-Aug-09	1790	4.26	8.51 x 10 ⁻⁴	6700	4422	1:2	Experimenter Error	No	Failed Fla\E2 control	XPIIX0096X0055 ANTCT081909
ACTD	21-Aug-09	2487	2.67	1.19 x 10 ⁻³	7320	7907	1:2	Negative	No	Failed Fla\E2 control, Reduction	XPIIX0096X0055 ANTCT082109
ACTD	27-Aug-09	725	5.19	4.29 x 10 ⁻⁴	8731	3738	1:2	Positive but IC ₅₀ value could not be calculated	No	Failed Fla\E2 control	XPIIX0055X0065 ANTCT082709
ACTD	13-Oct-09	1249	4.70	2.95 x 10 ⁻⁴	6775	3738	1:2	Negative	No	Failed Ral\E2 Ref. Standard	XPIIX0077X0055 ANTCT101309
ACTD	14-Oct-09	2664	5.82	3.16 x 10 ⁻⁴	7550	5118	1:2	Positive but IC ₅₀ value could not be calculated	Yes	Experimenter error	2009-10-14XPIIXANTCTX0055X0077
ACTD	23-Nov-09	4500	8.30	2.87 x 10 ⁻⁴	7341	1022	1:2	3.35 x 10 ⁻¹	Yes		2009-11-23XPIIXANTCTX0058X0055
ANDRO	19-Aug-09	1831	6.27	9.06 x 10 ⁻⁴	6081	3777	1:2	Positive, but IC ₅₀ value could not be calculated	No	Failed E2 Control	XPIIX0100X0104 ANTCT081909
ANDRO	21-Aug-09	2608	3.18	1.37 x 10 ⁻³	6661	5415	1:2	6.67 x 10 ⁺¹	Yes		XPIIX00100X0104 ANTCT082109
BPA	19-Aug-09	1708	4.11	7.84 x 10 ⁻⁴	6293	4555	1:2	Positive but IC ₅₀ value could not be calculated	No	Failed E2 control	XPIIX0105X0094 ANTCT081909
BPA	27-Aug-09	439	3.98	1.10 x 10 ⁻³	10434	5612	1:2	Positive but IC ₅₀ value could not be calculated	No	Failed Fla\E2 control	XPIIX0088X0094 ANTCT082709
BPA	07-Oct-09	8018	4.42	2.81 x 10 ⁻⁴	12824	-5278	1:2	Negative	No	Failed DMSO and E2 control	2009-10-07 AntCT-X0077-X0094

Test Substance	Date	DMSO	Reduction ¹	Ral/E2 Reference Standard IC ₅₀ (µg/mL)	E2 Cont	Fla\E2 Cont	Test Substance Dilution	Test Substance IC ₅₀ (µg/mL)	Was Plate Used for Data Analysis?	Reason Why Plate Was Not Used	Experiment I.D.
BPA	28-Oct-09	1436	6.93	2.73 x 10 ⁻⁴	8116	3237	1:2	Negative	Yes	Experimenter error	2009-10-28-28XPIIIANTCTX0074X0094
BPA	24-Nov-09	6510	5.87	4.21 x 10 ⁻⁴	9827	1368	1:2	2.80 x 10 ⁰	Yes		2009-11-24XPIIIANTCTX0094X0096
BPB	02-Jul-09	2465	5.28	1.10 x 10 ⁻³	7413	4737	1:2	Positive but IC ₅₀ value could not be calculated	Yes		XPIII0102X0093 ANTCT090709
CLOM	26-Jun-09	1457	7.96	1.02 x 10 ⁻³	5760	3779	1:2	Positive but IC ₅₀ value could not be calculated	No	Failed E2, FLA\E2 Control	XPIII0092X0083 ANTCT090630
CLOM	15-Aug-09	1899	9.51	1.10 x 10 ⁻³	8721	1212	1:5	1.18 x 10 ⁰	Yes		XPIII0097X0092 ANTCT081509
COU	19-Aug-09	2011	5.09	8.47 x 10 ⁻⁴	6924	4689	1:2	Negative	Yes		XPIII0052X0090 ANTCT081909
CUM	02-Jul-09	5252	6.37	1.05 x 10 ⁻³	2071	-3045	1:2	Negative	No	Failed E2, FLA/E2 Control	XPIII0086X0099 ANTCT090709
CUM	13-Aug-09	1327	3.21	1.46 x 10 ⁻³	6579	3646	1:2	Positive but IC ₅₀ value could not be calculated	Yes		XPIII0099X0058 ANTCT090709
DAI	19-Aug-09	2011	5.09	8.47 x 10 ⁻⁴	6924	4689	1:5	Negative	Yes		XPIII0052X0090 ANTCT081909
DBP	19-Aug-09	3941	3.20	1.28 x 10 ⁻³	10229	6198	1:2	2.30 x 10 ⁻¹	No	Failed Fla\E2 control	XPIII0088X0067 ANTCT082109
DBP	27-Aug-09	439	3.98	1.10 x 10 ⁻³	10434	5612	1:2	5.24 x 10 ⁺¹	No	Failed Fla\E2 control	XPIII0088X0094 ANTCT082709
DBP	05-Nov-09	1368	9.93	4.50 x 10 ⁻⁴	8541	2770	1:2	Positive but IC ₅₀ value could not be calculated	Yes	Experimenter error	2009-11-04XPIIIANTCTX0068X0088
DBP	23-Nov-09	6860	5.71	4.50 x 10 ⁻⁴	10169	1486	1:2	1.28 x 10 ⁺²	Yes		2009-11-23XPIIIAntCTX0088X0065

Test Substance	Date	DMSO	Reduction ¹	Ral/E2 Reference Standard IC ₅₀ (µg/mL)	E2 Cont	Fla\E2 Cont	Test Substance Dilution	Test Substance IC ₅₀ (µg/mL)	Was Plate Used for Data Analysis?	Reason Why Plate Was Not Used	Experiment I.D.
DBP	15-Dec-09	2801	4.45	2.48 x 10 ⁻⁴	7667	2359	1:2	Positive but IC ₅₀ value could not be calculated	Yes		2009-12-15XPIIIANTCTX0065X0088
DDE	19-Aug-09	2068	4.66	8.53 x 10 ⁻⁴	7053	5507	1:2	Negative	Yes		XPIII0073X0072 ANTCT081909
DEHP	26-Jun-09	48	5.08	9.93 x 10 ⁻⁴	257	108	1:2	Negative	No	Equipment malfunction	XPIII0087X0086 ANTCT090630
DEHP	02-Jul-09	5252	6.37	1.05 x 10 ⁻³	2071	-3045	1:2	Negative	No	Failed E2, FLA/E2 Control	XPIII0086X0099 ANTCT090709
DEHP	15-Aug-09	2526	10.44	1.05 x 10 ⁻³	10688	776	1:2	Positive but IC ₅₀ value could not be calculated	Yes		XPIII0086X0083 ANTCT081509
DES	19-Aug-09	3941	6.09	6.78 x 10 ⁻⁴	3635	1136	1:5	Negative	No	Failed E2 control	XPIII0085X0084 ANTCT081909
DES	21-Aug-09	415	3.45	1.25 x 10 ⁻³	7282	684	1:5	Negative	Yes		XPIII0085X0084 ANTCT082109
DEX	26-Jun-09	1096	5.69	4.46 x 10 ⁻⁴	8385	4465	1:2	Negative	Yes		XPIII0042X0089 ANTCT090630
DHT	19-Aug-09	1790	4.26	8.51 x 10 ⁻⁴	6700	4422	1:2	Negative	No	Failed Fla\E2 control	XPIII0096X0055 ANTCT081909
DHT	21-Aug-09	2487	2.67	1.19 x 10 ⁻³	7320	7907	1:2	Negative	No	Failed Fla\E2 control, Reduction	XPIII0096X0055 ANTCT082109
DHT	27-Aug-09	647	6.03	5.32 x 10 ⁻⁴	9275	3836	1:2	Negative	No	Failed FLA\E2 Control	XPIII0096X0067 ANTCT082709
DHT	16-Oct-09	1314	5.57	5.26 x 10 ⁻⁴	8079	4510	1:2	Negative	No	Failed FLA\E2 Control	2009-10-15XPIIIANTCTX0074X0096
DHT	30-Oct-09	1626	9.62	3.10 x 10 ⁻⁴	7613	2492	1:2	Negative	Yes	Experimenter error	2009-10-28XPIIIANTCTX0097X0067

Test Substance	Date	DMSO	Reduction ¹	Ral/E2 Reference Standard IC ₅₀ (µg/mL)	E2 Cont	Fla/E2 Cont	Test Substance Dilution	Test Substance IC ₅₀ (µg/mL)	Was Plate Used for Data Analysis?	Reason Why Plate Was Not Used	Experiment I.D.
DHT	24-Nov-09	6510	5.87	4.21 x 10 ⁻⁴	9827	1368	1:2	Negative	Yes		2009-11-24XPIIIANTCTX0094X0096
DIC	26-Jun-09	48	5.08	9.93 x 10 ⁻⁴	257	108	1:2	Negative	No	Equipment malfunction	XPIII0087X0086 ANTCT090630
DIC	02-Jul-09	2272	4.79	8.14 x 10 ⁻⁴	7326	4922	1:2	Positive but IC ₅₀ value could not be calculated	Yes		XPIII0080X0087 ANTCT090709
E1	19-Aug-09	1831	6.27	9.06 x 10 ⁻⁴	6081	3777	1:2	Negative	No	Failed E2 Control	XPIII0100X0104 ANTCT081909
E1	21-Aug-09	2608	3.18	1.37 x 10 ⁻³	6661	5415	1:2	1.16 x 10 ⁰	Yes		XPIII00100X0104ANTCT082109
E2	19-Aug-09	1708	4.11	7.84 x 10 ⁻⁴	6293	4555	1:2	Negative	No	Failed E2 control	XPIII0105X0094 ANTCT081909
E2	27-Aug-09	642	5.15	1.15 x 10 ⁻³	7050	2850	1:2	Negative	No	Failed FLA\E2 Control	XPIII0105X0082 ANTCT082709
E2	13-Oct-09	1599	7.43	2.30 x 10 ⁻⁴	7110	4351	1:2	Negative	Yes	Experimenter error	XPIII0058X0105 ANTCT102309
E2	30-Nov-09	3162	4.74	2.61 x 10 ⁻⁴	8232	3540	1:2	4.36 x 10 ⁰	Yes		2009-11-30XPIIIAntCTX0152X0105
EE	02-Jul-09	2865	6.78	1.05 x 10 ⁻³	7005	2966	1:2	1.82 x 10 ⁺²	Yes		XPIII0103X0078 ANTCT090709
EPB	26-Jun-09	1457	7.96	1.02 x 10 ⁻³	5760	3779	1:2	Positive but IC ₅₀ value could not be calculated	No	Failed E2, FLA\E2 Control	XPIII0092X0083 ANTCT090630
EPB	15-Aug-09	2526	10.44	1.05 x 10 ⁻³	10688	776	1:2	Positive but IC ₅₀ value could not be calculated	Yes		XPIII0086X0083 ANTCT081509
EST	19-Aug-09	3941	6.09	6.78 x 10 ⁻⁴	3635	1136	1:2	Negative	No	Failed E2 control	XPIII0085X0084 ANTCT081909

Test Substance	Date	DMSO	Reduction ¹	Ral/E2 Reference Standard IC ₅₀ (µg/mL)	E2 Cont	Fla/E2 Cont	Test Substance Dilution	Test Substance IC ₅₀ (µg/mL)	Was Plate Used for Data Analysis?	Reason Why Plate Was Not Used	Experiment I.D.
EST	21-Aug-09	415	3.45	1.25 x 10 ⁻³	7282	684	1:2	Negative	Yes		XPIIX0085X0084 ANTCT082109
FLO	19-Aug-09	2307	5.66	7.76 x 10 ⁻⁴	6150	4055	1:2	Negative	No	Failed E2 Control	XPIIX0077X0082 ANTCT081909
FLO	21-Aug-09	1835	3.09	1.30 x 10 ⁻³	6894	6699	1:2	Negative	No	Failed FLA\E2 Control	XPIIX0082X0077 ANTCT082109
FLO	27-Aug-09	642	5.15	1.15 x 10 ⁻³	7050	2850	1:2	Negative	No	Failed FLA\E2 Control	XPIIX0105X0082 ANTCT082709
FLO	04-Nov-09	10979	5.48	3.20 x 10 ⁻⁴	7854	2330	1:2	Negative	No	Failed DMSO Control	2009-11- 04AntCTX0082X0 147
FLO	5-Nov-09	8712	5.93	2.97 x 10 ⁻⁴	7691	2494	1:2	Positive but IC ₅₀ value could not be calculated	No	Failed DMSO control	2009-11- 08X0082X0147Ant
FLO	24-Nov-09	5009	5.18	4.64 x 10 ⁻⁴	8575	1410	1:2	Negative	Yes		2009-11- 24XPIIAntCTX00 82X0023
HEX	02-Jul-09	2865	6.78	1.05 x 10 ⁻³	7005	2966	1:2	1.37 x 10 ⁺¹	Yes		XPIIX0103X0078 ANTCT090709
HFLUT	26-Jun-09	1096	5.69	4.46 x 10 ⁻⁴	8385	4465	1:2	Negative	Yes		XPIIX0042X0089 ANTCT090630
KEP	02-Jul-09	1508	3.40	7.47 x 10 ⁻⁴	7431	3748	1:2	Positive but IC ₅₀ value could not be calculated	Yes		XPIIX0066X0079 ANTCT090709
KMP	02-Jul-09	2272	4.79	8.14 x 10 ⁻⁴	7326	4922	1:2	Positive but IC ₅₀ value could not be calculated	Yes		XPIIX0080X0087 ANTCT090709
MET	26-Jun-09	1094	4.81	8.10 x 10 ⁻⁴	11443	4179	1:2	Positive but IC ₅₀ value could not be calculated	No	Failed E2 control	XPIIX0074X0071 ANTCT090630

Test Substance	Date	DMSO	Reduction ¹	Ral/E2 Reference Standard IC ₅₀ (µg/mL)	E2 Cont	Fla\E2 Cont	Test Substance Dilution	Test Substance IC ₅₀ (µg/mL)	Was Plate Used for Data Analysis?	Reason Why Plate Was Not Used	Experiment I.D.
MET	07-Oct-09	5527	10.61	3.70 x 10 ⁻⁴	41227	23164	1:2	Negative	No	Failed E2 Control, Ral\E2 reference standard	2009-10-07 AntCT-X0071-X0074
MET	16-Oct-09	1314	5.57	5.26 x 10 ⁻⁴	8079	4510	1:2	Negative	No	Failed FLA\E2 Control	2009-10-15XPIIIANTCTX0074X0096
MET	28-Oct-09	1436	6.93	2.73 x 10 ⁻⁴	8116	3237	1:2	Negative	Yes	Experimenter error	2009-10-28-28XPIIIANTCTX0074X0094
MET	23-Nov-09	6803	10.14	3.14 x 10 ⁻⁴	7307	1135	1:2	1.56 x 10 ⁺¹	Yes		2009-11-23 XPIIIANTCTX0071X0074
MOR	19-Aug-09	2264	4.89	8.09 x 10 ⁻⁴	6601	4450	1:2	Negative	Yes		XPIII0076X0075 ANTCT081909
MOR	21-Aug-09	2611	3.05	1.13 x 10 ⁻³	5502	4852	1:2	Positive but IC ₅₀ value could not be calculated	No	Failed Reduction	XPIII0076X0075 ANTCT082109
MOR	27-Aug-09	575	7.47	5.65 x 10 ⁻⁴	8379	3832	1:2	Positive but IC ₅₀ value could not be calculated	No	Failed FLA\E2 Control	XPIII0075X0076 ANTCT082709
MTEST	19-Aug-09	2307	5.66	7.76 x 10 ⁻⁴	6150	4055	1:2	Positive but IC ₅₀ value could not be calculated	No	Failed E2 Control	XPIII0077X0082 ANTCT081909
MTEST	21-Aug-09	1835	3.09	1.30 x 10 ⁻³	6894	6699	1:2	Positive but IC ₅₀ value could not be calculated	No	Failed FLA\E2 Control	XPIII0082X0077 ANTCT082109
MTEST	07-Oct-09	8018	4.42	2.81 x 10 ⁻⁴	12824	-5278	1:2	Negative	No	Failed DMSO and E2 control	2009-10-07 AntCT-X0077-X0094
MTEST	13-Oct-09	1249	4.70	2.95 x 10 ⁻⁴	6775	3738	1:2	Negative	No	Failed Ral\E2 Ref. Standard	XPIII0077X0055 ANTCT101309

Test Substance	Date	DMSO	Reduction ¹	Ral/E2 Reference Standard IC ₅₀ (µg/mL)	E2 Cont	Fla\E2 Cont	Test Substance Dilution	Test Substance IC ₅₀ (µg/mL)	Was Plate Used for Data Analysis?	Reason Why Plate Was Not Used	Experiment I.D.
MTEST	14-Oct-09	2664	5.82	3.16 x 10 ⁻⁴	7550	5118	1:2	Negative	Yes	Experimenter error	2009-10-14XPIIIANTCTX0055X0077
MTEST	24-Nov-09	5534	5.50	4.21 x 10 ⁻⁴	7065	1063	1:2	Negative	Yes		2009-11-24XPIIIANTCTX0067X0077
NEN	19-Aug-09	2264	4.89	8.09 x 10 ⁻⁴	6601	4450	1:2	Negative	Yes		XPIII0076X0075 ANTCT081909
NEN	21-Aug-09	2611	3.05	1.13 x 10 ⁻³	5502	4852	1:2	Positive but IC ₅₀ value could not be calculated	No	Failed Reduction	XPIII0076X0075 ANTCT082109
NEN	27-Aug-09	575	7.47	5.65 x 10 ⁻⁴	8379	3832	1:2	Negative	No	Failed FLA\E2 Control	XPIII0075X0076 ANTCT082709
OCT	15-Aug-09	1899	9.51	1.10 x 10 ⁻³	8721	1212	1:2	1.26 x 10 ⁺¹	Yes		XPIII0097X0092 ANTCT081509
OHTAM	13-Aug-09	1327	3.21	1.46 x 10 ⁻³	6579	3646	1:5	Positive but IC ₅₀ value could not be calculated	Yes		XPIII0099X0058 ANTCT090709
OHTAM	13-Oct-09	1599	7.43	2.30 x 10 ⁻⁴	7110	4351	1:5	3.18 x 10 ⁻¹	Yes		XPIII0058X0105 ANTCT102309
OHTAM	23-Nov-09	4500	8.30	2.87 x 10 ⁻⁴	7341	1022	1:5	1.91 x 10 ⁻³	Yes		2009-11-23XPIIIANTCTX0058X0055
PBARB	19-Aug-09	2068	4.66	8.53 x 10 ⁻⁴	7053	5507	1:2	Positive but IC ₅₀ value could not be calculated	Yes		XPIII0073X0072 ANTCT081909
PPTH	26-Jun-09	1094	4.81	8.10 x 10 ⁻⁴	11443	4179	1:2	Negative	No	Failed E2 control	XPIII0074X0071 ANTCT090630
PPTH	07-Oct-09	5527	10.61	3.70 x 10 ⁻⁴	41227	23164	1:2	Negative	No	Failed E2 Control, Ral\E2 reference standard	2009-10-07 AntCT-X0071-X0074

Test Substance	Date	DMSO	Reduction ¹	Ral/E2 Reference Standard IC ₅₀ (µg/mL)	E2 Cont	Fla/E2 Cont	Test Substance Dilution	Test Substance IC ₅₀ (µg/mL)	Was Plate Used for Data Analysis?	Reason Why Plate Was Not Used	Experiment I.D.
PPTH	16-Oct-09	3373	8.66	2.03 x 10 ⁻⁴	5310	4445	1:2	Negative	No	Failed E2 and Fla/E2 control	2009-10-14XPIIIANTCTX0067X0071
PPTH	04-Nov-09	13015	6.67	4.07 x 10 ⁻⁴	8048	2085	1:2	Positive but IC ₅₀ value could not be calculated	No	Failed DMSO control	2009-11-04ANTCTX0070X0071
PPTH	05-Nov-09	957	6.03	2.32 x 10 ⁻⁴	7177	3920	1:3	Negative	Yes	Experimenter error	2009-11-05XPIIIANTCTX0070X0071
PPTH	23-Nov-09	6803	10.14	3.14 x 10 ⁻⁴	7307	1135	1:2	7.60 x 10 ⁺²	Yes		2009-11-23XPIIIANTCTX0071X0074
PTU	19-Aug-09	2909	5.96	8.56 x 10 ⁻⁴	5228	1872	1:2	Negative	No	Failed E2 control	XPIII0070X0068ANTCT081909
PTU	21-Aug-09	4088	3.97	1.31 x 10 ⁻³	5515	2086	1:2	Positive but IC ₅₀ value could not be calculated	No	Failed E2 control	XPIII0070X0068ANTCT082109
PTU	04-Nov-09	13015	6.67	4.07 x 10 ⁻⁴	8048	2085	1:2	Negative	No	Failed DMSO control	2009-11-04ANTCTX0070X0071
PTU	05-Nov-09	957	6.03	2.32 x 10 ⁻⁴	7177	3920	1:2	Negative	Yes	Experimenter error	2009-11-05XPIIIANTCTX0070X0071
PTU	23-Nov-09	6276	7.94	2.93 x 10 ⁻⁴	7311	1073	1:2	Positive but IC ₅₀ value could not be calculated	Yes		2009-11-23XPIIIANTCTX0068X0070
Ral	26-Jun-09	1443	6.44	8.84 x 10 ⁻⁴	9465	5405	1:2	1.10 x 10 ⁻³	Yes		XPIII0101X0069ANTCT090630
SAZ	19-Aug-09	2909	5.96	8.56 x 10 ⁻⁴	5228	1872	1:2	Negative	No	Failed E2 control	XPIII0070X0068ANTCT081909
SAZ	21Aug-09	4088	3.97	1.31 x 10 ⁻³	5515	2086	1:5	Positive but IC ₅₀ value could not be calculated	No	Failed E2 control	XPIII0070X0068ANTCT082109

Test Substance	Date	DMSO	Reduction ¹	Ral/E2 Reference Standard IC ₅₀ (µg/mL)	E2 Cont	Fla\E2 Cont	Test Substance Dilution	Test Substance IC ₅₀ (µg/mL)	Was Plate Used for Data Analysis?	Reason Why Plate Was Not Used	Experiment I.D.
SAZ	05-Nov-09	1368	9.93	4.50 x 10 ⁻⁴	8541	2770	1:2	Positive but IC ₅₀ value could not be calculated	Yes	Experimenter error	2009-11-04XPIIIANTCTX0068X0088
SAZ	23-Nov-09	6276	7.94	2.93 x 10 ⁻⁴	7311	1073	1:2	1.42 x 10 ⁺¹	Yes		2009-11-23XPIIIANTCTX0068X0070
SBP	26-Jun-09	1443	6.44	8.84 x 10 ⁻⁴	9465	5405	1:2	Positive but IC ₅₀ value could not be calculated	Yes		XPIII0101X0069ANTCT090630
TCPA	02-Jul-09	2465	5.28	1.10 x 10 ⁻³	7413	4737	1:2	Positive but IC ₅₀ value could not be calculated	Yes		XPIII0102X0093ANTCT090709
TEST	19-Aug-09	3691	5.22	8.13 x 10 ⁻⁴	4406	1344	1:2	Positive but IC ₅₀ value could not be calculated	No	Failed E2 Control	XPIII0067X0147ANTCT081909
TEST	21-Aug-09	3941	3.20	1.28 x 10 ⁻³	10229	6198	1:2	Positive but IC ₅₀ value could not be calculated	No	Failed Fla\E2 control	XPIII0088X0067ANTCT082109
TEST	27-Aug-09	647	6.03	5.32 x 10 ⁻⁴	9275	3836	1:2	Positive but IC ₅₀ value could not be calculated	No	Failed Fla\E2 control	XPIII0096X0067ANTCT082709
TEST	16-Oct-09	3373	8.66	2.03 x 10 ⁻⁴	5310	4445	1:2	Negative	No	Failed E2 and Fla\E2 control	2009-10-14XPIIIANTCTX0067X0071
TEST	30-Oct-09	1626	9.62	3.10 x 10 ⁻⁴	7613	2492	1:2	Negative	Yes	Experimenter error	2009-10-28XPIIIANTCTX0097X0067
TEST	24-Nov-09	5534	5.50	4.21 x 10 ⁻⁴	7065	1063	1:2	Negative	Yes		2009-11-24XPIIIANTCTX0067X0077
TPA	27-Aug-09	725	5.19	4.29 x 10 ⁻⁴	8731	3738	1:2	Positive but IC ₅₀ value could not be calculated	No	Failed Fla\E2 control	XPIII0055X0065ANTCT082709

Test Substance	Date	DMSO	Reduction ¹	Ral/E2 Reference Standard IC ₅₀ (µg/mL)	E2 Cont	Fla/E2 Cont	Test Substance Dilution	Test Substance IC ₅₀ (µg/mL)	Was Plate Used for Data Analysis?	Reason Why Plate Was Not Used	Experiment I.D.
TPA	05-Nov-09	926	13.02	3.13 x 10 ⁻⁴	8387	3465	1:2	7.82 x 10 ⁻²	Yes	Experimenter error	2009-11-4-XPIIIANTCTX002 find X0065
TPA	23-Nov-09	6860	5.71	4.50 x 10 ⁻⁴	10169	1486	1:2	9.12 x 10 ⁻¹	Yes		2009-11-23XPIIIAntCTX0088X0065
TPA	15-Dec-09	2801	4.45	2.48 x 10 ⁻⁴	7667	2359	1:2	Negative	Yes		2009-12-15XPIIIANTCTX0065X0088
VIN	02-Jul-09	1508	3.40	7.47 x 10 ⁻⁴	7431	3748	1:2	4.59 x 10 ⁺¹	Yes		XPIII0066X0079 ANTCT090709

Abbreviations: ACTD = Actinomycin D; ANDRO = 4-androstenedione; BPA = Bisphenol A; BPB = Bisphenol B; CLOM = Clomiphene citrate; Cont = Control; COU = Coumestrol; CUM = 4-cumylphenol; DAI = Daidzein; DBP = Di-*n*-butyl phthalate; DDE = *p,p'*-DDE; DEHP = Diethylhexyl phthalate; DES = Diethylstilbestrol; DEX = Dexamethasone; DHT = 5 α -dihydrotestosterone; DIC = Dicofoil; DMSO = Dimethyl sulfoxide; E1 = 17 α -estradiol; E2 = 17 β -estradiol; EE = 17 α -ethinyl estradiol; EPB = Ethyl paraben; EST = Estrone; Fla = Flavone; FLO = Fluoranthene; HEX = *meso*-hexestrol; HFLUT = Hydroxyflutamide; IC₅₀ = half-maximal inhibitory concentration; I.D. = Identification; KEP = Kepone; KMP= Kaempferol; MET = *p,p'*-methoxychlor; MTEST = Methyl testosterone; MOR = Morin; NEN = Norethynodrel; OCT = 4-*tert*-octylphenol; OHTAM = 4-hydroxytamoxifen; PBARB = Phenobarbital; PPTH = Phenolphthalin; PTU = Propylthiouracil; Ral = Raloxifene HCl; SAZ = Sodium azide; SBP = 2-*sec*-butylphenol; TCPA = 2,4,5-trichlorophenoxyacetic acid; TEST = Testosterone; TPA = 12 - *O*-Tetradecanoylphorbol-13-acetate; VIN = Vinclozolin

¹ Reduction for comprehensive test plates is measured by dividing the averaged highest Ral/E2 reference standard RLU value by the lowest averaged Ral/E2 reference standard RLU value.

Table 9 Phase III Agonist Comprehensive Test Plates Tested at ECVAM

Test Substance	Date	DMSO	Induction ¹	E2 Reference Standard EC ₅₀ (µg/mL)	MET	Test Substance Dilution	Test Substance EC ₅₀ (µg/mL)	Was Plate Used for Data Analysis?	Reason Why Plate Was Not Used	Experiment I.D.
ACTD	06-May-09	12390	1.34	2.95 x 10 ⁻⁶	-2906	1:2	Negative	No	Failed DMSO, Induction, and MET	Ag CT1 V0018 V0020
ACTD	27-May-09	3105	9.67	1.54 x 10 ⁻⁶	6273	1:2	Negative	Yes		Ag CT2 V0018 V0020
ANDRO	28-Oct-09	2592	9.71	2.77 x 10 ⁻⁶	7567	1:2	Positive, but EC ₅₀ could not be calculated	Yes		Ag CT V0025 V0028
API	27-May-09	15498	1.61	Positive, but EC ₅₀ could not be calculated	3024	1:5	Positive, but EC ₅₀ could not be calculated	No	Failed DMSO, Induction, Methoxychlor Control	Ag CT1 V0052 V0053
API	10-Jun-09	7306	3.24	3.62 x 10 ⁻⁶	5915	1:5	2.60 x 10 ⁻¹	Yes		Ag CT2 V0052 V0053
API	25-Nov-09	2799	8.05	3.56 x 10 ⁻⁶	6489	1:5	7.79 x 10 ⁻¹	Yes		Ag CT3A V0052 V0053
API	25-Nov-09	2603	7.3	2.75 x 10 ⁻⁶	6126	1:5	2.79 x 10 ⁻¹	Yes		Ag CT3B V0052 V0053
CLOM	13-May-09	1097	11.17	1.86 x 10 ⁻⁶	8527	1:5	Positive, but EC ₅₀ could not be calculated	Yes		Ag CT1 V0023 V0030
COU	27-May-09	21273	1.25	Positive, but an EC ₅₀ could not be calculated	-8464	1:5	5.06 x 10 ⁻¹	No	Failed DMSO, Induction, Methoxychlor Control	Ag CT1 V0048 V0049
COU	10-Jun-09	19994	1.32	Positive, but an EC ₅₀ could not be calculated	-2405	1:5	Positive, but EC ₅₀ could not be calculated	No	Failed DMSO, Induction, Methoxychlor Control	Ag CT2 V0048 V0049
COU	17-Jun-09	22961	1.24	Positive, but an EC ₅₀ could not be calculated	545	1:5	Positive, but EC ₅₀ could not be calculated	No	Failed DMSO, Induction, and Methoxychlor Control	Ag CT3 V0048 V0049

Test Substance	Date	DMSO	Induction ¹	E2 Reference Standard EC ₅₀ (µg/mL)	MET	Test Substance Dilution	Test Substance EC ₅₀ (µg/mL)	Was Plate Used for Data Analysis?	Reason Why Plate Was Not Used	Experiment I.D.
COU	11-Nov-09	1957	12.85	4.55 x 10 ⁻⁶	6823	1:5	6.92 x 10 ⁻²	Yes		Ag CT4 V0048 V0049
CUM	20-May-09	5627	4.76	1.93 x 10 ⁻⁶	5886	1:5	6.43 x 10 ⁻²	Yes		Ag CT1 V0043 V0044
DAI	20-May-09	5627	4.76	1.93 x 10 ⁻⁶	5886	1:2	3.02 x 10 ⁻¹	Yes		Ag CT1 V0043 V0044
DBA	20-May-09	1917	14.46	1.83 x 10 ⁻⁶	5798	1:5	Positive, but EC ₅₀ could not be calculated	Yes		Ag CT1 V0027 V2001
DBP	13-May-09	1415	9.88	1.61 x 10 ⁻⁶	8442	1:2	5.33 x 10 ⁻²	Yes		Ag CT1 V0033 V0034
DDE	20-May-09	4683	5.44	2.55 x 10 ⁻⁶	5714	1:2	Positive, but EC ₅₀ could not be calculated	Yes		Ag CT1 V0041 V0042
DEHP	13-May-09	1318	10.10	2.55 x 10 ⁻⁶	7495	1:2	Positive, but EC ₅₀ could not be calculated	Yes		Ag CT1 V0031 V0032
DEX	20-May-09	4683	5.44	2.55 x 10 ⁻⁶	5714	1:2	3.78 x 10 ⁰	Yes		Ag CT1 V0041 V0042
DHT	28-Oct-09	3639	7.23	4.77 x 10 ⁻⁶	8470	1:5	Positive, but EC ₅₀ could not be calculated	Yes		Ag CT V0047
DIC	20-May-09	2095	12.42	4.24 x 10 ⁻⁵	5448	1:2	Positive, but EC ₅₀ could not be calculated	Yes		Ag CT1 V0039 V0040
E1	27-May-09	15498	1.61	Positive, but an EC ₅₀ could not be calculated	3024	1:5	Positive, but EC ₅₀ could not be calculated	No	Failed DMSO, Induction, Methoxychlor Control	Ag CT1 V0052 V0053
E1	10-Jun-09	7306	3.24	3.62 x 10 ⁻¹⁶	5915	1:5	1.78 x 10 ⁻³	Yes		Ag CT2 V0052 V0053
E1	25-Nov-09	2799	8.05	3.56 x 10 ⁻⁶	6489	1:5	1.19 x 10 ⁻⁴	Yes		Ag CT3A V0052 V0053

Test Substance	Date	DMSO	Induction ¹	E2 Reference Standard EC ₅₀ (µg/mL)	MET	Test Substance Dilution	Test Substance EC ₅₀ (µg/mL)	Was Plate Used for Data Analysis?	Reason Why Plate Was Not Used	Experiment I.D.
E1	25-Nov-09	2603	7.3	2.75 x 10 ⁻⁶	6126	1:5	1.12 x 10 ⁻⁴	Yes		Ag CT3B V0052 V0053
E2	27-May-09	5258	4.91	1.87 x 10 ⁻⁶	6068	1:5	4.54 x 10 ⁻⁸	Yes		Ag CT1 V0050 V0051
E2	10-Jun-09	23658	1.24	3.01 x 10 ⁻⁹	-4301	1:5	Negative	No	Failed DMSO, Induction, Methoxychlor Control	Ag CT2 V0050 V0051
EPB	06-May-09	5637	2.93	2.70 x 10 ⁻⁶	3845	1:2	4.70 x 10 ⁰	No	Failed Induction	Ag CT1 V0021 V0022
EPB	10-Jun-09	1824	13.68	1.67 x 10 ⁻⁶	6656	1:2	5.3 x 10 ⁰	Yes		Ag CT2 V0021 V0022
EST	27-May-09	5258	4.91	1.87 x 10 ⁻⁶	6068	1:5	6.39 x 10 ⁻⁵	Yes		Ag CT1 V0050 V0051
EST	10-Jun-09	23658	1.24	3.01 x 10 ⁻⁹	-4301	1:5	Positive, but EC ₅₀ could not be calculated	No	Failed DMSO, Induction, Methoxychlor Control	Ag CT2 V0050 V0051
FLO	20-May-09	3215	7.68	Positive, but an EC ₅₀ could not be calculated	5513	1:5	Negative	No	Abnormal E2 reference standard curve	Ag CT1 V0024 V0026
FLO	27-May-09	3030	8.96	2.17 x 10 ⁻⁶	7399	1:5	Positive, but EC ₅₀ could not be calculated	Yes		Ag CT2 V0024 V0026
HEX	27-May-09	21273	1.25	Positive, but an EC ₅₀ could not be calculated	-8464	1:5	Negative	No	Failed DMSO, Induction, Methoxychlor Control	Ag CT1 V0048 V0049
HEX	10-Jun-09	19994	1.32	Positive, but an EC ₅₀ could not be calculated	-2405	1:5	Negative	No	Failed DMSO, Induction, Methoxychlor Control	Ag CT2 V0048 V0049

Test Substance	Date	DMSO	Induction ¹	E2 Reference Standard EC ₅₀ (µg/mL)	MET	Test Substance Dilution	Test Substance EC ₅₀ (µg/mL)	Was Plate Used for Data Analysis?	Reason Why Plate Was Not Used	Experiment I.D.
HEX	17-Jun-09	22961	1.24	Positive, but an EC ₅₀ could not be calculated	545	1:5	Negative	No	Failed DMSO, Induction, and Methoxychlor Control	Ag CT3 V0048 V0049
HEX	11-Nov-09	1957	12.85	4.55 x 10 ⁻⁶	6823	1:5	3.13 x 10 ⁻⁶	Yes		Ag CT4 V0048 V0049
HFLUT	06-May-09	12390	1.34	2.95 x 10 ⁻⁶	-2906	1:5	Negative	No	Failed DMSO, Induction, and MET	Ag CT1 V0018 V0020
HFLUT	27-May-09	3105	9.67	1.54 x 10 ⁻⁶	6273	1:5	Positive, but EC ₅₀ could not be calculated	Yes		Ag CT2 V0018 V0020
KEP	20-May-09	2263	12.52	1.73 x 10 ⁻⁶	5924	1:5	6.02 x 10 ⁻²	Yes		Ag CT1 V0037 V0038
KMP	20-May-09	2263	12.52	1.73 x 10 ⁻⁶	5924	1:5	Positive, but EC ₅₀ could not be calculated	Yes		Ag CT1 V0037 V0038
MET	13-May-09	1965	7.63	2.24 x 10 ⁻⁶	5928	1:5	4.22 x 10 ⁻¹	Yes		Ag CT1 V0035 V0036
MOR	06-May-09	1496	11.17	2.19 x 10 ⁻⁶	6696	1:2	8.11 x 10 ⁰	Yes		Ag CT1 V0016 V0017
MTEST	28-Oct-09	3947	5.27	1.56 x 10 ⁻⁶	8789	1:5	3.79 x 10 ⁰	Yes		Ag CT V0029 V0046
NEN	06-May-09	5637	2.93	2.70 x 10 ⁻⁶	3845	1:5	3.81 x 10 ⁻⁴	No	Failed Induction	Ag CT1 V0021 V0022
NEN	10-Jun-09	1824	13.68	1.67 x 10 ⁻⁶	6656	1:5	1.09 x 10 ⁻⁴	Yes		Ag CT2 V0021 V0022
OCT	13-May-09	1965	7.63	2.24 x 10 ⁻⁶	5928	1:5	1.11 x 10 ⁻²	Yes		Ag CT1 V0035 V0036
OHTAM	20-May-09	2095	12.42	4.24 x 10 ⁻⁵	5448	1:2	Negative	Yes		Ag CT1 V0039 V0040
PBARB	28-Oct-09	2592	9.71	2.77 x 10 ⁻⁶	7567	1:2	Negative	Yes		Ag CT V0025 V0028

Test Substance	Date	DMSO	Induction ¹	E2 Reference Standard EC ₅₀ (µg/mL)	MET	Test Substance Dilution	Test Substance EC ₅₀ (µg/mL)	Was Plate Used for Data Analysis?	Reason Why Plate Was Not Used	Experiment I.D.
PPTH	06-May-09	1496	11.17	2.19 x 10 ⁻⁶	6696	1:2	3.20 x 10 ¹	Yes		Ag CT1 V0016 V0017
PROG	13-May-09	1318	10.10	2.55 x 10 ⁻⁶	7495	1:5	3.98 x 10 ⁻¹	Yes		Ag CT1 V0031 V0032
PTU	06-May-09	4847	3.32	1.70 x 10 ⁻⁶	8300	1:2	5.86 x 10 ¹	No	Abnormal E2 reference standard curve	Ag CT1 V0014 V0015
PTU	10-Jun-09	9446	2.57	2.13 x 10 ⁻⁶	4202	1:2	2.51 x 10 ⁺¹	No	Failed DMSO, Induction	Ag CT2 V0014 V0015
PTU	17-Jun-09	3362	10.06	4.21 x 10 ⁻⁷	8260	1:2	4.31 x 10 ⁰	Yes		Ag CT3 V0014 V0015
Ral	20-May-09	3215	7.68	Positive, but EC ₅₀ could not be calculated	5513	1:2	Negative	No	Abnormal E2 reference standard curve	Ag CT1 V0024 V0026
Ral	27-May-09	3030	8.96	2.17 x 10 ⁻⁶	7399	1:2	Negative	Yes		Ag CT2 V0024 V0026
RES	27-May-09	2599	10.77	1.68 x 10 ⁻⁶	7592	1:5	9.10 x 10 ⁻¹	Yes		Ag CT2 V2001 CT1 V0045
SAZ	06-May-09	4847	3.32	1.70 x 10 ⁻⁶	8300	1:5	Positive, but EC ₅₀ could not be calculated	No	Abnormal E2 reference standard curve	Ag CT1 V0014 V0015
SAZ	10-Jun-09	9446	2.57	2.13 x 10 ⁻⁶	4202	1:5	Positive, but EC ₅₀ could not be calculated	No	Failed DMSO, Induction	Ag CT2 V0014 V0015
SAZ	17-Jun-09	3362	10.06	4.21 x 10 ⁻⁷	8260	1:5	Positive, but EC ₅₀ could not be calculated	Yes		Ag CT3 V0014 V0015
SBP	28-Oct-09	2336	10.47	3.11 x 10 ⁻⁶	6962	1:2	Positive, but EC ₅₀ could not be calculated	Yes		Ag CT V0013 V0019
TAM	13-May-09	1097	11.17	1.86 x 10 ⁻⁶	8527	1:2	Positive, but EC ₅₀ could not be calculated	Yes		Ag CT1 V0023 V0030

Test Substance	Date	DMSO	Induction ¹	E2 Reference Standard EC ₅₀ (µg/mL)	MET	Test Substance Dilution	Test Substance EC ₅₀ (µg/mL)	Was Plate Used for Data Analysis?	Reason Why Plate Was Not Used	Experiment I.D.
TCPA	13-May-09	1415	9.88	1.61 x 10 ⁻⁶	8442	1:2	Positive, but EC ₅₀ could not be calculated	Yes		Ag CT1 V0033 V0034
TEST	28-Oct-09	3947	5.27	1.56 x 10 ⁻⁶	8789	1:5	Positive, but EC ₅₀ could not be calculated	Yes		Ag CT V0029 V0046
TPA	28-Oct-09	2336	10.47	3.11 x 10 ⁻⁶	6962	1:5	Negative	Yes		Ag CT V0013 V0019

Abbreviations: ACTD = Actinomycin D; ANDRO = 4-androstenedione; API = Apigenin; CLOM = Clomiphene citrate; COU = Coumestrol; CUM = 4-cumylphenol; DAI = Daidzein; DBA = Dibenzo[*a,h*]anthracene; DBP = Di-*n*-butyl phthalate; DDE = *p,p'*-DDE; DEHP = Diethylhexyl phthalate; DEX = Dexamethasone; DHT = 5 α -dihydrotestosterone; DIC = Dicofol; DMSO = Dimethyl sulfoxide; E1 = 17 α -estradiol; E2 = 17 β -estradiol; EC₅₀ = half maximal effective concentration; EPB = Ethyl paraben; EST = Estrone; FLO = Fluoranthene; HEX = *meso*-hexestrol; HFLUT = Hydroxyflutamide; I.D. = Identification; KEP = Kepone; KMP = Kaempferol; MET = *p,p'*-methoxychlor; MOR = Morin; MTEST = Methyl testosterone; NEN = Norethynodrel; OCT = 4-*tert*-octylphenol; OHTAM = 4-hydroxytamoxifen; PBARB = Phenobarbital; PPTH = Phenolphthalin; PROG = Progesterone; PTU = Propylthiouracil; Ral= Raloxifene HCl; RES = Resveratrol; SAZ = Sodium azide; SBP = 2-*sec*-butylphenol; TAM = Tamoxifen; TCPA = 2,4,5-trichlorophenoxyacetic acid; TEST = Testosterone; TPA = 12 - *O* -Tetradecanoylphorbol-13-acetate

¹ Induction for comprehensive test plates is measured by dividing the averaged highest E2 reference standard RLU value by the averaged DMSO control RLU value.

Table 10 Phase III Antagonist Plates Tested at ECVAM

Test Substance	Date	DMSO	Reduction ¹	Ral/E2 Reference Standard IC ₅₀ (µg/mL)	E2 Cont	Fla\E2 Cont	Test Substance Dilution	Test Substance IC ₅₀ (µg/mL)	Was Plate Used for Data Analysis?	Reason Why Plate Was Not Used	Experiment I.D.
ACTD	17-Jun-09	19552	9.72	5.10 x 10 ⁻⁴	14187	-21568	1:2	Negative	No	Failed DMSO, E2 control	Anta CT1 V0018 V0020
ACTD	30-Sep-09	2604	8.03	8.13 x 10 ⁻⁴	14385	657	1:2	Negative	No	Failed E2 Control	Anta CT2 V0018 V0020
ACTD	07-Oct-09	5220	7.09	1.04 x 10 ⁻³	10328	343	1:2	2.49 x 10 ⁻²	Yes		Anta CT3 V0018 V0020
ANDRO	04-Nov-09	6450	6.60	9.84 x 10 ⁻⁴	8664	-91	1:5	Positive, but IC ₅₀ could not be calculated	Yes		Anta CT1B V0112 V0114
BPA	21-Oct-09	4267	6.60	1.02 x 10 ⁻³	9443	99	1:2	1.22 x 10 ⁺¹	Yes		Anta CT1 V0129 V0130
BPB	14-Oct-09	5220	7.09	1.07 x 10 ⁻³	10328	343	1:2	2.11 x 10 ⁰	Yes		Anta CT1 V0111 V0113
CLOM	14-Oct-09	5220	7.09	1.07 x 10 ⁻³	10328	343	1:2	Negative	Yes		Anta CT1 V0111 V0113
COU	17-Jun-09	3364	7.09	6.80 x 10 ⁻⁴	10764	193	1:5	Positive, but IC ₅₀ could not be calculated	Yes		Anta CT1 V0048 V0091
COU	30-Sep-09	2813	7.21	8.10 x 10 ⁻⁴	11621	694	1:5	Positive, but IC ₅₀ could not be calculated	No	Failed E2 Control	Anta CT2 V0048 V0091
COU	07-Oct-09	5174	7.20	1.50 x 10 ⁻³	9394	306	1:5	Positive, but IC ₅₀ could not be calculated	Yes		Anta CT3 V0048 V0091
CUM	14-Oct-09	3744	7.90	1.40 x 10 ⁻³	8825	525	1:2	Positive, but IC ₅₀ could not be calculated	Yes		Anta CT1 V0019 V0110
DAI	22-Oct-09	4514	8.65	1.01 x 10 ⁻³	8590	165	1:2	5.05 x 10 ⁰	Yes		Anta CT1 V0126 V0127
DBP	14-Oct-09	3207	9.09	9.32 x 10 ⁻⁴	9362	771	1:2	Negative	Yes		Anta CT1 V0118 V0119

Test Substance	Date	DMSO	Reduction ¹	Ral/E2 Reference Standard IC ₅₀ (µg/mL)	E2 Cont	Fla\E2 Cont	Test Substance Dilution	Test Substance IC ₅₀ (µg/mL)	Was Plate Used for Data Analysis?	Reason Why Plate Was Not Used	Experiment I.D.
DDE	22-Oct-09	4514	8.65	1.01 x 10 ⁻³	8590	165	1:2	Positive, but IC ₅₀ could not be calculated	Yes		Anta CT1 V0126 V0127
DEHP	17-Jun-09	2615	9.31	5.47 x 10 ⁻⁴	10599	669	1:5	7.46 x 10 ⁻¹	Yes		Anta CT1 V0096 V0097
DEHP	30-Sep-09	1949	7.73	8.00 x 10 ⁻⁴	14667	815	1:5	Positive, but IC ₅₀ could not be calculated	No	Failed E2 Control	Anta CT2 V0096 V0097
DEHP	07-Oct-09	3207	9.09	7.13 x 10 ⁻⁴	9362	771	1:5	1.62 x 10 ⁰	Yes		Anta CT3 V0096 V0097
DES	21-Oct-09	3596	8.06	1.21 x 10 ⁻³	7968	385	1:2	Positive, but IC ₅₀ could not be calculated	Yes		Anta CT1 V0124 V0125
DEX	14-Oct-09	3744	7.90	1.40 x 10 ⁻³	8825	525	1:2	Negative	Yes		Anta CT1 V0019 V0110
DHT	04-Nov-09	5498	5.11	5.57 x 10 ⁻⁴	10384	165	1:2	8.94 x 10 ⁰	Yes		Anta CT1 V0106 V0108
DIC	21-Oct-09	3596	8.06	1.21 x 10 ⁻³	7968	385	1:2	Positive, but IC ₅₀ could not be calculated	Yes		Anta CT1 V0124 V0125
E1	14-Oct-09	5174	7.33	9.83 x 10 ⁻⁴	9394	306	1:2	Positive, but IC ₅₀ could not be calculated	Yes		Anta CT1 V0116 V0117
E2	30-Sep-09	2487	6.28	6.77 x 10 ⁻⁴	14339	928	1:5	5.08 x 10 ⁰	No	Failed E2 Control	Anta CT2 V0101 V0107
E2	07-Oct-09	3944	6.18	9.15 x 10 ⁻⁴	10412	572	1:5	3.25 x 10 ⁰	Yes		Anta CT3 V0101 V0107
EE	21-Oct-09	3156	9.25	1.06 x 10 ⁻³	9599	475	1:2	1.31 x 10 ⁺¹	Yes		Anta CT1 C0122 V0123
EPB	17-Jun-09	2797	9.13	6.24 x 10 ⁻⁴	10676	597	1:2	1.04 x 10 ⁺²	Yes		Anta CT1 V0098 V0100
EPB	30-Sep-09	2601	9.08	6.36 x 10 ⁻⁴	13597	883	1:2	8.18 x 10 ⁺¹	No	Failed E2 Control	Anta CT2 V0098 V0100

Test Substance	Date	DMSO	Reduction ¹	Ral/E2 Reference Standard IC ₅₀ (µg/mL)	E2 Cont	Fla\E2 Cont	Test Substance Dilution	Test Substance IC ₅₀ (µg/mL)	Was Plate Used for Data Analysis?	Reason Why Plate Was Not Used	Experiment I.D.
EPB	07-Oct-09	3786	8.34	7.01 x 10 ⁻⁴	8150	829	1:2	1.01 x 10 ⁺²	Yes		Anta CT3 V0098 V0100
EST	21-Oct-09	3156	9.25	1.06 x 10 ⁻³	9599	475	1:2	Positive, but IC ₅₀ could not be calculated	Yes		Anta CT1 C0122 V0123
FLO	14-Oct-09	3786	8.34	7.01 x 10 ⁻⁴	8150	829	1:2	9.12 x 10 ⁰	Yes		Anta CT1 V0120 V0121
HEX	04-Nov-09	5498	5.11	5.57 x 10 ⁻⁴	10384	165	1:2	Positive, but IC ₅₀ could not be calculated	Yes		Anta CT1 V0106 V0108
HFLUT	17-Jun-09	19552	9.72	5.10 x 10 ⁻⁴	14187	-21568	1:5	5.00 x 10 ⁰	No	Failed DMSO, E2 control	Anta CT1 V0018 V0020
HFLUT	30-Sep-09	2604	8.03	8.13 x 10 ⁻⁴	14385	657	1:5	6.81 x 10 ⁰	No	Failed E2 Control	Anta CT2 V0018 V0020
HFLUT	07-Oct-09	5220	7.09	1.04 x 10 ⁻³	10328	343	1:5	5.00 x 10 ⁰	Yes		Anta CT3 V0018 V0020
KEP	04-Nov-09	3848	6.22	9.26 x 10 ⁻⁴	11762	467	1:2	9.95 x 10 ⁺¹	No	Failed E2 control	Anta CT1 V0103 V0104
KEP	11-Nov-09	4937	7.02	1.03 x 10 ⁻³	9604	482	1:2	6.78 x 10 ⁰	Yes		Anta CT2 V0103 V004
KMP	14-Oct-09	3786	8.34	7.01 x 10 ⁻⁴	8150	829	1:2	Positive, but IC ₅₀ could not be calculated	Yes		Anta CT1 V0120 V0121
MET	14-Oct-09	3207	9.09	9.32 x 10 ⁻⁴	9362	771	1:2	Positive, but IC ₅₀ could not be calculated	Yes		Anta CT1 V0118 V0119
MOR	04-Nov-09	3848	6.22	9.26 x 10 ⁻⁴	11762	467	1:2	Positive, but IC ₅₀ could not be calculated	No	Failed E2 control	Anta CT1 V0103 V0104
MOR	11-Nov-09	4937	7.02	1.03 x 10 ⁻³	9604	482	1:2	Positive, but IC ₅₀ could not be calculated	Yes		Anta CT2 V0103 V004

Test Substance	Date	DMSO	Reduction ¹	Ral/E2 Reference Standard IC ₅₀ (µg/mL)	E2 Cont	Fla\E2 Cont	Test Substance Dilution	Test Substance IC ₅₀ (µg/mL)	Was Plate Used for Data Analysis?	Reason Why Plate Was Not Used	Experiment I.D.
MTEST	04-Nov-09	4065	6.80	9.00 x 10 ⁻⁴	10977	363	1:2	1.61 x 10 ⁺¹	Yes		Anta CT1 V0013 V0093
NEN	04-Nov-09	5291	5.29	9.27 x 10 ⁻⁴	11160	395	1:2	2.07 x 10 ⁺¹	No	Failed E2 control	Anta CT1 V0099 V0102
NEN	11-Nov-09	3600	6.59	9.20 x 10 ⁻⁴	10075	1213	1:2	1.77 x 10 ⁺¹	Yes		Anta CT2 V0099 V0102
OCT	30-Sep-09	2487	6.28	6.77 x 10 ⁻⁴	14339	928	1:2	Positive, but IC ₅₀ could not be calculated	No	Failed E2 Control	Anta CT2 V0101 V0107
OCT	07-Oct-09	3944	6.18	9.15 x 10 ⁻⁴	10412	572	1:2	Positive, but IC ₅₀ could not be calculated	Yes		Anta CT3 V0101 V0107
OHTAM	18-Nov-09	2836	7.96	8.73 x 10 ⁻⁴	10418	930	1:2	Positive, but IC ₅₀ could not be calculated	Yes		Anta CT1A V0039
OHTAM	18-Nov-09	5124	7.25	9.66 x 10 ⁻⁴	8480	-34	1:2	Positive, but IC ₅₀ could not be calculated	Yes		Anta CT1B V0039
PBARB	04-Nov-09	5291	5.29	9.27 x 10 ⁻⁴	11160	395	1:2	Positive, but IC ₅₀ could not be calculated	No	Failed E2 control	Anta CT1 V0099 V0102
PBARB	11-Nov-09	3600	6.59	9.20 x 10 ⁻⁴	10075	1213	1:2	Positive, but IC ₅₀ could not be calculated	Yes		Anta CT2 V0099 V0102
PPTH	17-Jun-09	2797	9.13	6.24 x 10 ⁻⁴	10676	597	1:2	Positive, but IC ₅₀ could not be calculated	Yes		Anta CT1 V0098 V0100
PPTH	30-Sep-09	2601	9.08	6.36 x 10 ⁻⁴	13597	883	1:2	Positive, but IC ₅₀ could not be calculated	No	Failed E2 Control	Anta CT2 V0098 V0100
PPTH	07-Oct-09	3786	8.34	7.01 x 10 ⁻⁴	8150	829	1:2	Positive, but IC ₅₀ could not be calculated	Yes		Anta CT3 V0098 V0100

Test Substance	Date	DMSO	Reduction ¹	Ral/E2 Reference Standard IC ₅₀ (µg/mL)	E2 Cont	Fla\E2 Cont	Test Substance Dilution	Test Substance IC ₅₀ (µg/mL)	Was Plate Used for Data Analysis?	Reason Why Plate Was Not Used	Experiment I.D.
PTU	17-Jun-09	2615	9.31	5.47 x 10 ⁻⁴	10599	669	1:2	Positive, but IC ₅₀ could not be calculated	Yes		Anta CT1 V0096 V0097
PTU	30-Sep-09	1949	7.73	8.00 x 10 ⁻⁴	14667	815	1:2	Positive, but IC ₅₀ could not be calculated	No	Failed E2 Control	Anta CT2 V0096 V0097
PTU	07-Oct-09	3207	9.09	7.13 x 10 ⁻⁴	9362	771	1:2	Positive, but IC ₅₀ could not be calculated	Yes		Anta CT3 V0096 V0097
Ral	21-Oct-09	4267	6.60	1.02 x 10 ⁻³	9443	99	1:5	2.76 x 10 ⁻⁴	Yes		Anta CT1 V0129 V0130
SAZ	04-Nov-09	4362	5.73	1.10 x 10 ⁻³	13488	420	1:2	1.17 x 10 ⁺¹	No	Failed E2 control	Anta CT1 V0094 V0095
SAZ	11-Nov-09	3244	6.60	9.48 x 10 ⁻⁴	11197	1045	1:2	1.04 x 10 ⁺¹	No	Failed E2 control	Anta CT2 V0094 V0095
SAZ	18-Nov-09	7401	6.92	1.06 x 10 ⁻³	12660	-1559	1:2	1.05 x 10 ⁺¹	No	Failed DMSO, E2 control	Anta CT3A V0094 V0095
SAZ	18-Nov-09	6581	4.93	1.18 x 10 ⁻³	9643	-433	1:2	1.31 x 10 ⁺¹	Yes		Anta CT3B V0094 V0095
SBP	04-Nov-09	6450	6.60	9.84 x 10 ⁻⁴	8664	-91	1:5	Positive, but IC ₅₀ could not be calculated	Yes		Anta CT1B V0112 V0114
TCPA	17-Jun-09	3364	7.09	6.80 x 10 ⁻⁴	10764	193	1:5	Negative	Yes		Anta CT1 V0048 V0091
TCPA	30-Sep-09	2813	7.21	8.10 x 10 ⁻⁴	11621	694	1:5	Positive, but IC ₅₀ could not be calculated	No	Failed E2 Control	Anta CT2 V0048 V0091
TCPA	07-Oct-09	5174	7.20	1.50 x 10 ⁻³	9394	306	1:5	Negative	Yes		Anta CT3 V0048 V0091
TEST	04-Nov-09	4362	5.73	1.10 x 10 ⁻³	13488	420	1:2	Positive, but IC ₅₀ could not be calculated	No	Failed E2 control	Anta CT1 V0094 V0095

Test Substance	Date	DMSO	Reduction ¹	Ral/E2 Reference Standard IC ₅₀ (µg/mL)	E2 Cont	Fla\E2 Cont	Test Substance Dilution	Test Substance IC ₅₀ (µg/mL)	Was Plate Used for Data Analysis?	Reason Why Plate Was Not Used	Experiment I.D.
TEST	11-Nov-09	3244	6.60	9.48 x 10 ⁻⁴	11197	1045	1:2	3.00 x 10 ⁺¹	No	Failed E2 control	Anta CT2 V0094 V0095
TEST	18-Nov-09	7401	6.92	1.06 x 10 ⁻³	12660	-1559	1:2	3.62 x 10 ⁺¹	No	Failed DMSO, E2 control	Anta CT3A V0094 V0095
TEST	18-Nov-09	6581	4.93	1.18 x 10 ⁻³	9643	-433	1:2	Positive, but IC ₅₀ could not be calculated	Yes		Anta CT3B V0094 V0095
TPA	04-Nov-09	4065	6.80	9.00 x 10 ⁻⁴	10977	363	1:5	Negative	Yes		Anta CT1 V0013 V0093
VIN	14-Oct-09	5174	7.33	9.83 x 10 ⁻⁴	9394	306	1:2	Negative	Yes		Anta CT1 V0116 V0117

Abbreviations: ACTD = Actinomycin D; ANDRO = 4-androstenedione; BPA = Bisphenol A; BPB = Bisphenol B; CLOM = Clomiphene citrate; Cont = Control; COU = Coumestrol; CUM = 4-cumylphenol; DAI = Daidzein; DBP = Di-*n*-butyl phthalate; DDE = *p,p'*-DDE; DEHP = Diethylhexyl phthalate; DES = Diethylstilbestrol; DEX = Dexamethasone; DHT = 5 α -dihydrotestosterone; DIC = Dicofol; DMSO = Dimethyl sulfoxide; E1 = 17 α -estradiol; E2 = 17 β -estradiol; EE = 17 α -ethinyl estradiol; EPB = Ethyl paraben; EST = Estrone; Fla = Flavone; FLO = Fluoranthene; HEX = *meso*-hexestrol; HFLUT = Hydroxyflutamide; IC₅₀ = half-maximal inhibitory concentration; I.D. = Identification; KEP = Kepone; KMP= Kaempferol; MET = *p,p'*-methoxychlor; MTEST = Methyl testosterone; MOR = Morin; NEN = Norethynodrel; OCT = 4-*tert*-octylphenol; OHTAM = 4-hydroxytamoxifen; PBARB = Phenobarbital; PPTH = Phenolphthalin; PTU = Propylthiouracil; Ral = Raloxifene HCl; SAZ = Sodium azide; SBP = 2-*sec*-butylphenol; TCPA = 2,4,5-trichlorophenoxyacetic acid; TEST = Testosterone; TPA = 12 - *O* -Tetradecanoylphorbol-13-acetate; VIN = Vinclozolin

¹ Reduction for comprehensive test plates is measured by dividing the averaged highest Ral/E2 reference standard RLU value by the lowest averaged Ral/E2 reference standard RLU value.

Table 11 Phase III Agonist Comprehensive Test Plates Tested at Hiyoshi

Test Substance	Date	DMSO	Induction ¹	E2 Reference Standard EC ₅₀ (µg/mL)	MET	Test Substance Dilution	Test Substance EC ₅₀ (µg/mL)	Was Plate Used for Data Analysis?	Reason Why Plate Was Not Used	Experiment I.D.
ACTD	25-Jun-09	5672	4.61	1.71 x 10 ⁻⁶	7383	1:2	Negative	Yes		AgCTT081107-Ag-3-4
ANDRO	17-Jul-09	6811	4.83	1.80 x 10 ⁻⁶	6610	1:2	Positive, but EC ₅₀ could not be calculated	Yes		AgCTT081107-Ag-2-2
API	24-Jul-09	5615	5.39	1.94 x 10 ⁻⁶	7448	1:2	4.37 x 10 ⁻¹	Yes		AgCTT081107-Ag-3-3
CLOM	01-Aug-09	4262	4.64	1.39 x 10 ⁻⁶	9531	1:2	Positive, but EC ₅₀ could not be calculated	Yes		AgCTT081107-Ag4-1
CLOM	12-Sep-09	3093	6.52	1.39 x 10 ⁻⁶	6600	1:5	2.62 x 10 ⁻²	Yes	Voluntary retest	AgCTT081107-AgRe2-1
COU	01-Aug-09	4883	4.35	1.46 x 10 ⁻⁶	8833	1:5	1.34 x 10 ⁻³	Yes		AgCTT081107-Ag4-4
CUM	17-Jul-09	6811	4.83	1.80 x 10 ⁻⁶	6610	1:2	8.39 x 10 ⁻²	Yes		AgCTT081107-Ag-2-2
DAI	01-Aug-09	4029	5.09	2.19 x 10 ⁻⁶	9463	1:2	1.88 x 10 ⁻¹	Yes		AgCTT081107-Ag4-3
DBA	25-Jul-09	4984	4.76	2.40 x 10 ⁻⁶	7001	1:2	Negative	Yes		AgCTT081107-Ag-3-1
DBA	09-Oct-09	6618	4.62	1.68 x 10 ⁻⁶	6317	1:5	Negative	Yes	Voluntary retest	AgCTT081107-AgRe3-2
DBP	04-Jun-09	2132	5.11	2.13 x 10 ⁻⁶	10845	1:2	2.35 x 10 ⁰	Yes		AgCTT081107-Ag1-2
DBP	12-Aug-09	7104	4.33	1.76 x 10 ⁻⁶	8060	1:2	2.09 x 10 ⁰	Yes		AgCTT081107-Ag1-6
DDE	04-Jun-09	2007	4.64	2.16 x 10 ⁻⁶	10255	1:2	Positive, but EC ₅₀ could not be calculated	Yes		AgCTT081107-AG1-4
DDE	12-Aug-09	7704	4.14	1.41 x 10 ⁻⁶	7100	1:2	Negative	Yes		AgCTT081107-Ag1-8

Test Substance	Date	DMSO	Induction ¹	E2 Reference Standard EC ₅₀ (µg/mL)	MET	Test Substance Dilution	Test Substance EC ₅₀ (µg/mL)	Was Plate Used for Data Analysis?	Reason Why Plate Was Not Used	Experiment I.D.
DDE	12-Sep-09	3093	6.52	1.39 x 10 ⁻⁶	6600	1:2	Positive, but EC ₅₀ could not be calculated	Yes		AgCTT081107-AgRe2-1
DDE	09-Oct-09	6538	4.52	1.73 x 10 ⁻⁶	6499	1:5	Positive, but EC ₅₀ could not be calculated	Yes	Voluntary retest	AgCTT081107-AgRe3-1
DEHP	08-Aug-09	8171	4.80	1.12 x 10 ⁻⁶	7298	1:2	Positive, but EC ₅₀ could not be calculated	Yes		AgCTT081107-Ag5-3
DEX	01-Aug-09	3977	5.30	1.29 x 10 ⁻⁶	9399	1:2	Positive, but EC ₅₀ could not be calculated	Yes		AgCTT081107-Ag4-2
DHT	25-Jul-09	6117	4.43	2.09 x 10 ⁻⁶	8189	1:2	3.13 x 10 ⁻²	Yes		AgCTT081107-Ag-3-2
DHT	28-Aug-09	6319	6.90	1.38 x 10 ⁻⁶	8182	1:5	2.08 x 10 ⁻²	Yes	Voluntary retest	AgCTT081107-AgRe1-3
DIC	08-Aug-09	8638	4.70	1.49 x 10 ⁻⁶	6397	1:2	Positive, but EC ₅₀ could not be calculated	Yes		AgCTT081107-Ag5-4
E1	17-Jul-09	7707	4.20	1.68 x 10 ⁻⁶	7211	1:2	9.04 x 10 ⁻⁵	Yes		AgCTT081107-Ag-2-4
E2	01-Aug-09	4262	4.64	1.39 x 10 ⁻⁶	9531	1:5	9.19 x 10 ⁻⁷	Yes		AgCTT081107-Ag4-1
EPB	08-Aug-09	8171	4.80	1.12 x 10 ⁻⁶	7298	1:2	3.75 x 10 ⁰	Yes		AgCTT081107-Ag5-3
EPB	28-Aug-09	6539	6.21	1.57 x 10 ⁻⁶	7979	1:2	3.29 x 10 ⁰	Yes	Voluntary retest	AgCTT081107-AgRe1-4
EST	25-Jul-09	4984	4.76	2.40 x 10 ⁻⁶	7001	1:2	Positive, but EC ₅₀ could not be calculated	Yes		AgCTT081107-Ag-3-1
EST	28-Aug-09	5351	7.45	1.76 x 10 ⁻⁶	8831	1:5	4.93 x 10 ⁻⁵	Yes	Voluntary retest	AgCTT081107-AgRe1-2

Test Substance	Date	DMSO	Induction ¹	E2 Reference Standard EC ₅₀ (µg/mL)	MET	Test Substance Dilution	Test Substance EC ₅₀ (µg/mL)	Was Plate Used for Data Analysis?	Reason Why Plate Was Not Used	Experiment I.D.
FLO	01-Aug-09	7677	4.23	1.19 x 10 ⁻⁶	8035	1:5	1.88 x 10 ⁰	Yes		AgCTT081107-Ag5-1
HEX	04-Jun-09	2132	5.11	2.13 x 10 ⁻⁶	10845	1:5	4.87 x 10 ⁻⁶	Yes		AgCTT081107-Ag1-2
HEX	12-Aug-09	7104	4.33	1.76 x 10 ⁻⁶	8060	1:5	3.43 x 10 ⁻⁶	Yes		AgCTT081107-Ag1-6
HFLUT	25-Jul-09	6117	4.43	2.09 x 10 ⁻⁶	8189	1:2	Negative	Yes		AgCTT081107-Ag-3-2
KEP	01-Aug-09	7694	3.90	9.23 x 10 ⁻⁷	7337	1:2	2.12 x 10 ⁻¹	Yes		AgCTT081107-Ag5-2
KMP	24-Jul-09	5615	5.39	1.94 x 10 ⁻⁶	7448	1:5	9.60 x 10 ⁻²	Yes		AgCTT081107-Ag-3-3
MET	04-Jun-09	2007	4.64	2.16 x 10 ⁻⁶	10255	1:5	8.88 x 10 ⁻¹	Yes		AgCTT081107-AG1-4
MET	12-Aug-09	7704	4.14	1.41 x 10 ⁻⁶	7100	1:5	3.54 x 10 ⁻¹	Yes		AgCTT081107-Ag1-8
MOR	01-Aug-09	4029	5.09	2.19 x 10 ⁻⁶	9463	1:2	1.45 x 10 ⁺¹	Yes		AgCTT081107-Ag4-3
MTEST	17-Jul-09	8088	4.25	1.86 x 10 ⁻⁶	6649	1:2	Positive, but EC ₅₀ could not be calculated	Yes		AgCTT081107-Ag-2-3
MTEST	28-Aug-09	5351	7.45	1.76 x 10 ⁻⁶	8831	1:5	7.15 x 10 ⁻¹	Yes	Voluntary retest	AgCTT081107-AgRe1-2
NEN	17-Jul-09	6702	4.19	1.72 x 10 ⁻⁶	6865	1:2	Positive, but EC ₅₀ could not be calculated	Yes		AgCTT081107-Ag-2-1
NEN	28-Aug-09	5569	7.38	1.34 x 10 ⁻⁶	8268	1:5	1.80 x 10 ⁻⁴	Yes	Voluntary retest	AgCTT081107-AgRe1-1
OCT	01-Aug-09	7694	3.90	9.23 x 10 ⁻⁷	7337	1:2	Positive, but EC ₅₀ could not be calculated	Yes		AgCTT081107-Ag5-2
OCT	28-Aug-09	6539	6.21	1.57 x 10 ⁻⁶	7979	1:2	2.08 x 10 ⁻³	Yes	Voluntary retest	AgCTT081107-AgRe1-4

Test Substance	Date	DMSO	Induction ¹	E2 Reference Standard EC ₅₀ (µg/mL)	MET	Test Substance Dilution	Test Substance EC ₅₀ (µg/mL)	Was Plate Used for Data Analysis?	Reason Why Plate Was Not Used	Experiment I.D.
OCT	12-Sep-09	5787	3.31	1.33 x 10 ⁻⁶	5671	1:2	Positive, but EC ₅₀ could not be calculated	Yes		AgCTT081107-AgRe2-2
OHTAM	17-Jul-09	6702	4.19	1.72 x 10 ⁻⁶	6865	1:2	6.54 x 10 ⁻⁶	Yes		AgCTT081107-Ag-2-1
OHTAM	09-Oct-09	6538	4.52	1.73 x 10 ⁻⁶	6499	1:5	Negative	Yes	Voluntary retest	AgCTT081107-AgRe3-1
OHTAM	03-Nov-09	9383	4.80	1.50 x 10 ⁻⁶	7923	1:5	Positive, but EC ₅₀ could not be calculated	Yes	Voluntary retest	AgCTT081107-AgRe4-1
PBARB	Hiyoshi was unable to obtain licensing for this scheduled substance									Not Tested
PPTH	4-Jun-09	1874	4.57	1.95 x 10 ⁻⁶	12266	1:2	2.39 x 10 ⁺¹	Yes		AgCTT081107-Ag1-3
PPTH	12-Aug-09	6893	4.29	1.66 x 10 ⁻⁶	7266	1:2	2.95 x 10 ⁺¹	Yes		AgCTT081107-Ag1-7
PROG	17-Jul-09	7707	4.20	1.68 x 10 ⁻⁶	7211	1:2	2.59 x 10 ⁻¹	Yes		AgCTT081107-Ag-2-4
PROG	09-Oct-09	6618	4.62	1.68 x 10 ⁻⁶	6317	1:5	4.85 x 10 ⁻¹	Yes	Voluntary retest	AgCTT081107-AgRe3-2
PTU	25-Jun-09	5672	4.61	1.71 x 10 ⁻⁶	7383	1:2	Negative	Yes		AgCTT081107-Ag-3-4
Ral	4-Jun-09	1874	4.57	1.95 x 10 ⁻⁶	12266	1:2	Negative	Yes		AgCTT081107-Ag1-3
Ral	12-Aug-09	6893	4.29	1.66 x 10 ⁻⁶	7266	1:2	Negative	Yes		AgCTT081107-Ag1-7
RES	01-Aug-09	3977	5.30	1.29 x 10 ⁻⁶	9399	1:5	Positive, but EC ₅₀ could not be calculated	Yes		AgCTT081107-Ag4-2
RES	28-Aug-09	6319	6.90	1.38 x 10 ⁻⁶	8182	1:5	Negative	Yes	Voluntary retest	AgCTT081107-AgRe1-3
RES	07-Oct-09	6539	5.09	2.27 x 10 ⁻⁶	6310	1:5	Negative	Yes	Voluntary retest	AgCTT081107-AgRe3-3

Test Substance	Date	DMSO	Induction ¹	E2 Reference Standard EC ₅₀ (µg/mL)	MET	Test Substance Dilution	Test Substance EC ₅₀ (µg/mL)	Was Plate Used for Data Analysis?	Reason Why Plate Was Not Used	Experiment I.D.
SAZ	01-Aug-09	4883	4.35	1.46 x 10 ⁻⁶	8833	1:2	Negative	Yes		AgCTT081107-Ag4-4
SBP	4-Jun-09	1362	5.41	2.19 x 10 ⁻⁶	11723	1:2	5.31 x 10 ⁰	Yes		AgCTT081107-Ag1-1
SBP	12-Aug-09	6953	4.37	1.47 x 10 ⁻⁶	9250	1:2	3.56 x 10 ⁰	Yes		AgCTT081107-Ag1-5
TAM	08-Aug-09	8638	4.70	1.49 x 10 ⁻⁶	6397	1:2	Positive, but EC ₅₀ could not be calculated	Yes		AgCTT081107-Ag5-4
TAM	07-Oct-09	6539	5.09	2.27 x 10 ⁻⁶	6310	1:5	2.50 x 10 ⁻²	Yes	Voluntary retest	AgCTT081107-AgRe3-3
TCPA	4-Jun-09	1362	5.41	2.19 x 10 ⁻⁶	11723	1:2	Positive, but EC ₅₀ could not be calculated	Yes		AgCTT081107-Ag1-1
TCPA	12-Aug-09	6953	4.37	1.47 x 10 ⁻⁶	9250	1:2	Negative	Yes		AgCTT081107-Ag1-5
TEST	17-Jul-09	8088	4.25	1.86 x 10 ⁻⁶	6649	1:2	Positive, but EC ₅₀ could not be calculated	Yes		AgCTT081107-Ag-2-3
TEST	28-Aug-09	5569	7.38	1.34 x 10 ⁻⁶	8268	1:5	2.87 x 10 ⁺¹	Yes	Voluntary retest	AgCTT081107-AgRe1-1
TPA	01-Aug-09	7677	4.23	1.19 x 10 ⁻⁶	8035	1:5	Negative	Yes		AgCTT081107-Ag5-1

Abbreviations: ACTD = Actinomycin D; ANDRO = 4-androstenedione; API = Apigenin; CLOM = Clomiphene citrate; COU = Coumestrol; CUM = 4-cumylphenol; DAI = Daidzein; DBA = Dibenzo[*a,h*]anthracene; DBP = Di-*n*-butyl phthalate; DDE = *p,p'*-DDE; DEHP = Diethylhexyl phthalate; DEX = Dexamethasone; DHT = 5 α -dihydrotestosterone; DIC = Dicofol; DMSO = Dimethyl sulfoxide; E1 = 17 α -estradiol; E2 = 17 β -estradiol; EC₅₀ = half maximal effective concentration; EPB = Ethyl paraben; EST = Estrone; FLO = Fluoranthene; HEX = *meso*-hexestrol; HFLUT = Hydroxyflutamide; I.D. = Identification; KEP = Kepone; KMP = Kaempferol; MET = *p,p'*-methoxychlor; MOR = Morin; MTEST = Methyl testosterone; NEN – Norethynodrel; OCT = 4-*tert*-octylphenol; OHTAM = 4-hydroxytamoxifen; PBARB = Phenobarbital; PPTH = Phenolphthalin; PROG = Progesterone; PTU = Propylthiouracil; Ral= Raloxifene HCl; RES = Resveratrol; SAZ = Sodium azide; SBP = 2-*sec*-butylphenol; TAM = Tamoxifen; TCPA = 2,4,5-trichlorophenoxyacetic acid; TEST = Testosterone; TPA = 12 - *O* -Tetradecanoylphorbol-13-acetate

¹ Induction for comprehensive test plates is measured by dividing the averaged highest E2 reference standard RLU value by the averaged DMSO control RLU value.

Table 12 Phase III Antagonist Comprehensive Plates Tested at Hiyoshi

Test Substance	Date	DMSO	Reduction ¹	Ral/E2 Reference Standard IC ₅₀ (µg/mL)	E2 Cont	Fla\E2 Cont	Test Substance Dilution	Test Substance IC ₅₀ (µg/mL)	Was Plate Used for Data Analysis?	Reason Why Plate Was Not Used	Experiment I.D.
ACTD	10-Jun-09	2411	6.90	4.22 x 10 ⁻⁴	6163	2923	1:2	Positive, but IC ₅₀ could not be calculated	Yes		AntCTT081114-Ant-1.2
ANDRO	26-Jun-09	5937	11.06	5.94 x 10 ⁻⁴	6776	1125	1:2	Positive, but IC ₅₀ could not be calculated	Yes		AntCTT081114-Ant-3.1
BPA	18-Jun-09	2660	11.62	4.26 x 10 ⁻⁴	6362	1826	1:2	1.71 x 10 ⁺¹	Yes		AntCTT081114-Ant-2.2
BPB	18-Jun-09	2865	8.23	5.20 x 10 ⁻⁴	5911	1339	1:2	Positive, but IC ₅₀ could not be calculated	Yes		AntCTT081114-Ant-2.3
CLOM	04-Jul-09	6809	8.12	3.80 x 10 ⁻⁴	6214	430	1:5	Positive, but IC ₅₀ could not be calculated	Yes		AntCTT081114-Ant-4.3
COU	10-Jun-09	2411	6.90	4.22 x 10 ⁻⁴	6163	2923	1:2	Positive, but IC ₅₀ could not be calculated	Yes		AntCTT081114-Ant-1.2
CUM	26-Jun-09	5937	11.06	5.94 x 10 ⁻⁴	6776	1125	1:5	Positive, but IC ₅₀ could not be calculated	Yes		AntCTT081114-Ant-3.1
DAI	04-Jul-09	7791	10.49	5.57 x 10 ⁻⁴	5567	485	1:2	4.57 x 10 ⁺¹	Yes		AntCTT081114-Ant-4.4
DBP	10-Jun-09	2754	8.69	4.86 x 10 ⁻⁴	6762	2101	1:2	Positive, but IC ₅₀ could not be calculated	Yes		AntCTT081114-Ant-1.4
DDE	18-Jun-09	2865	8.23	5.20 x 10 ⁻⁴	5911	1339	1:5	Negative	Yes		AntCTT081114-Ant-2.3
DEHP	11-Jul-09	10124	11.79	5.12 x 10 ⁻⁴	5640	1400	1:5	1.55 x 10 ⁺¹	No	Failed DMSO Control	AntCTT081114-Ant-5.4
DEHP	11-Jul-09	2461	11.85	4.90 x 10 ⁻⁴	6481	721	1:5	Positive, but IC ₅₀ could not be calculated	Yes		AntCTT081114-Ant-5.8

Test Substance	Date	DMSO	Reduction ¹	Ral/E2 Reference Standard IC ₅₀ (µg/mL)	E2 Cont	Fla\E2 Cont	Test Substance Dilution	Test Substance IC ₅₀ (µg/mL)	Was Plate Used for Data Analysis?	Reason Why Plate Was Not Used	Experiment I.D.
DES	18-Jun-09	4578	10.02	6.89 x 10 ⁻⁴	6818	1327	1:2	4.57 x 10 ⁰	Yes		AntCTT081114-Ant-3.4
DEX	04-Jul-09	7791	10.49	5.57 x 10 ⁻⁴	5567	485	1:2	Positive, but IC ₅₀ could not be calculated	Yes		AntCTT081114-Ant-4.4
DHT	04-Jul-09	5644	10.27	6.69 x 10 ⁻⁴	6387	466	1:2	Negative	Yes		AntCTT081114-Ant-4.1
DIC	11-Jul-09	10124	11.79	5.12 x 10 ⁻⁴	5640	1400	1:5	Positive, but IC ₅₀ could not be calculated	No	Failed DMSO Control	AntCTT081114-Ant-5.4
DIC	11-Jul-09	2461	11.85	4.90 x 10 ⁻⁴	6481	721	1:5	Negative	Yes		AntCTT081114-Ant-5.8
E1	18-Jun-09	4576	8.57	6.10 x 10 ⁻⁴	6843	1181	1:2	5.33 x 10 ⁰	Yes		AntCTT081114-Ant-3.3
E2	04-Jul-09	6809	8.12	3.80 x 10 ⁻⁴	6214	430	1:5	8.09 x 10 ⁰	Yes		AntCTT081114-Ant-4.3
EE	18-Jun-09	4576	8.57	6.10 x 10 ⁻⁴	6843	1181	1:2	4.37 x 10 ⁺¹	Yes		AntCTT081114-Ant-3.3
EPB	11-Jul-09	9835	8.18	6.23 x 10 ⁻⁴	4399	1022	1:2	8.17 x 10 ⁺¹	No	Failed DMSO Control	AntCTT081114-Ant-5.3
EPB	22-Aug-09	2267	11.09	4.50 x 10 ⁻⁴	5326	758	1:2	1.24 x 10 ⁺²	Yes		AntCTT081114-Ant-5.7
EST	18-Jun-09	4578	10.02	6.89 x 10 ⁻⁴	6818	1327	1:2	Positive, but IC ₅₀ could not be calculated	Yes		AntCTT081114-Ant-3.4
FLO	11-Jul-09	8451	10.77	5.03 x 10 ⁻⁴	5168	958	1:2	Negative	Yes		AntCTT081114-Ant-5.2
FLO	22-Aug-09	2018	13.84	3.95 x 10 ⁻⁴	5539	875	1:2	Negative	Yes		AntCTT081114-Ant-5.6
HEX	18-Jun-09	2657	9.87	4.36 x 10 ⁻⁴	6408	1833	1:5	2.62 x 10 ⁰	Yes		AntCTT081114-Ant-2.1

ICCVAM BG1Luc ER TA Evaluation Report

Test Substance	Date	DMSO	Reduction ¹	Ral/E2 Reference Standard IC ₅₀ (µg/mL)	E2 Cont	Fla\E2 Cont	Test Substance Dilution	Test Substance IC ₅₀ (µg/mL)	Was Plate Used for Data Analysis?	Reason Why Plate Was Not Used	Experiment I.D.
HFLUT	10-Jun-09	3102	6.24	4.55 x 10 ⁻⁴	6626	2482	1:5	Positive, but IC ₅₀ could not be calculated	Yes		AntCTT081114-Ant-1.1
KEP	11-Jul-09	8451	10.77	5.03 x 10 ⁻⁴	5168	958	1:5	Positive, but IC ₅₀ could not be calculated	Yes		AntCTT081114-Ant-5-2
KEP	22-Aug-09	2018	13.84	3.95 x 10 ⁻⁴	5539	875	1:5	Positive, but IC ₅₀ could not be calculated	Yes		AntCTT081114-Ant-5.6
KMP	04-Jul-09	5644	10.27	6.69 x 10 ⁻⁴	6387	466	1:2	2.07 x 10 ⁺¹	Yes		AntCTT081114-Ant-4.1
MET	18-Jun-09	3037	9.23	4.84 x 10 ⁻⁴	5819	1175	1:2	Positive, but IC ₅₀ could not be calculated	Yes		AntCTT081114-Ant-2.4
MOR	04-Jul-09	2093	13.88	4.44 x 10 ⁻⁴	5522	868	1:2	Positive, but IC ₅₀ could not be calculated	Yes		AntCTT081114-Ant-5.5
MOR	11-Jul-09	9129	9.45	5.98 x 10 ⁻⁴	5802	891	1:2	Positive, but IC ₅₀ could not be calculated	No	Failed DMSO Control	AntCTT081114-Ant-5.1
MTEST	18-Jun-09	4779	9.34	6.35 x 10 ⁻⁴	6385	1556	1:2	3.71 x 10 ⁺¹	Yes		AntCTT081114-Ant-3.2
NEN	18-Jun-09	3037	9.23	4.84 x 10 ⁻⁴	5819	1175	1:2	Positive, but IC ₅₀ could not be calculated	Yes		AntCTT081114-Ant-2.4
OCT	11-Jul-09	9835	8.18	6.23 x 10 ⁻⁴	4399	1022	1:5	Positive, but IC ₅₀ could not be calculated	No	Failed DMSO Control	AntCTT081114-Ant-5.3
OCT	22-Aug-09	2267	11.09	4.50 x 10 ⁻⁴	5326	758	1:5	Positive, but IC ₅₀ could not be calculated	Yes		AntCTT081114-Ant-5.7
OHTAM	10-Jun-09	3102	6.24	4.55 x 10 ⁻⁴	6626	2482	1:5	1.50 x 10 ⁻³	Yes		AntCTT081114-Ant-1.1
PBARB	Hiyoshi was unable to obtain licensing for this scheduled substance										Not Tested

Test Substance	Date	DMSO	Reduction ¹	Ral/E2 Reference Standard IC ₅₀ (µg/mL)	E2 Cont	Fla\E2 Cont	Test Substance Dilution	Test Substance IC ₅₀ (µg/mL)	Was Plate Used for Data Analysis?	Reason Why Plate Was Not Used	Experiment I.D.
PPTH	18-Jun-09	2660	11.62	4.26 x 10 ⁻⁴	6362	1826	1:2	4.90 x 10 ⁺²	Yes		AntCTT081114-Ant-2.2
PTU	04-Jul-09	5183	9.66	5.55 x 10 ⁻⁴	6673	722	1:2	Positive, but IC ₅₀ could not be calculated	Yes		AntCTT081114-Ant-4.2
Ral	18-Jun-09	2657	9.87	4.36 x 10 ⁻⁴	6408	1833	1:5	4.51 x 10 ⁻⁴	Yes		AntCTT081114-Ant-2.1
SAZ	04-Jul-09	2093	13.88	4.44 x 10 ⁻⁴	5522	868	1:2	Positive, but IC ₅₀ could not be calculated	Yes		AntCTT081114-Ant-5.5
SAZ	11-Jul-09	9129	9.45	5.98 x 10 ⁻⁴	5802	891	1:2	Positive, but IC ₅₀ could not be calculated	No	Failed DMSO Control	AntCTT081114-Ant-5.1
SBP	10-Jun-09	2754	8.69	4.86 x 10 ⁻⁴	6762	2101	1:2	Positive, but IC ₅₀ could not be calculated	Yes		AntCTT081114-Ant-1.4
TCPA	10-Jun-09	2493	6.57	4.46 x 10 ⁻⁴	6137	2194	1:2	Positive, but IC ₅₀ could not be calculated	Yes		AntCTT081114-Ant-1.3
TEST	18-Jun-09	4779	9.34	6.35 x 10 ⁻⁴	6385	1556	1:2	Positive, but IC ₅₀ could not be calculated	Yes		AntCTT081114-Ant-3.2
TPA	10-Jun09	2493	6.57	4.46 x 10 ⁻⁴	6137	2194	1:2	1.02 x 10 ⁺¹	Yes		AntCTT081114-Ant-1.3
VIN	04-Jul-09	5183	9.66	5.55 x 10 ⁻⁴	6673	722	1:5	Positive, but IC ₅₀ could not be calculated	Yes		AntCTT081114-Ant-4.2

Abbreviations: ACTD = Actinomycin D; ANDRO = 4-androstenedione; BPA = Bisphenol A; BPB = Bisphenol B; CLOM = Clomiphene citrate; Cont = Control; COU = Coumestrol; CUM = 4-cumylphenol; DAI = Daidzein; DBP = Di-*n*-butyl phthalate; DDE = *p,p'*-DDE; DEHP = Diethylhexyl phthalate; DES = Diethylstilbestrol; DEX = Dexamethasone; DHT = 5 α -dihydrotestosterone; DIC = Dicofol; DMSO = Dimethyl sulfoxide; E1 = 17 α -estradiol; E2 = 17 β -estradiol; EE = 17 α -ethinyl estradiol; EPB = Ethyl paraben; EST = Estrone; Fla = Flavone; FLO = Fluoranthene; HEX = *meso*-hexestrol; HFLUT = Hydroxyflutamide; IC₅₀ = half-maximal inhibitory concentration; I.D. = Identification; KEP = Kepone; KMP= Kaempferol; MET = *p,p'*-methoxychlor; MTEST = Methyl testosterone; MOR = Morin; NEN = Norethynodrel; OCT = 4-*tert*-octylphenol; OHTAM = 4-hydroxytamoxifen; PBARB = Phenobarbital; PPTH = Phenolphthalin; PTU = Propylthiouracil; Ral = Raloxifene HCl; SAZ = Sodium azide; SBP = 2-*sec*-butylphenol; TCPA = 2,4,5-trichlorophenoxyacetic acid; TEST = Testosterone; TPA = 12 - *O* -Tetradecanoylphorbol-13-acetate; VIN = Vinclozolin

¹ Reduction for comprehensive test plates is measured by dividing the averaged highest Ral/E2 reference standard RLU value by the lowest averaged Ral/E2 reference standard RLU value.