Figure Legend: Figure 1 Kupffer cell hyperplasia in a female F344/N rat from a 90-day study.

Comment: Kupffer cell hypertrophy and hyperplasia usually occur together and can be seen following uptake of foreign material, test agent, or metabolite, any of which may impart a pigment to the cytoplasm. Kupffer hyperplasia and hypertrophy may also occur in inflammatory conditions. The enlarged Kupffer cells may form sheets or small nodules.

Recommendation: This tissue change is rare in untreated rodents and should be diagnosed and graded whenever present. A description of the morphologic features and tissue distribution should be detailed in the pathology narrative. Because hypertrophy is a consequence of the phagocytic activity of these cells, a separate diagnosis of hypertrophy is generally not necessary. If pigmentation is prominent, a separate diagnosis of pigmentation, along with a qualitative grading of severity, may be appropriate.
Liver, Kupffer cell – Hyperplasia

References:

Abstract: http://www.cacheriverpress.com/books/pathmouse.htm

National Toxicology Program. 1994. NTP TR-435. Toxicology and Carcinogenesis Studies of 4,4'-Thiobis(6-t-butyl-m-cresol) (CAS No. 96-69-5) in F344/N Rats and B6C3F1 Mice (Feed Studies). NTP, Research Triangle Park, NC.

Full-Text: http://tpx.sagepub.com/content/38/7_suppl/5S.full

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