

Anti-Lead Monoclonal Antibody

ORDERING INFORMATION

Catalog No.: 60001 (clone Pb1).

Size: 0.5 ml ascites.

BACKGROUND

Exposure to potentially neurotoxic levels of lead occurs in approximately 9% of American children under 6 years of age, and many urban dwellings still contain dangerous levels of lead paint.

Diagnosis and treatment of chronic lead exposure has been hampered by the lack of a clear understanding of the specific mechanism of action of this toxic metal. QED Bioscience's monoclonal antibody to lead is the first of its kind to be offered to the healthcare and research communities for development of improved diagnostic assays of lead toxicity and for investigations into the underlying mechanism of lead toxicity.

SPECIFICATION SUMMARY

Antigen: Lead conjugated to keyhole limpet hemocyanin (KLH) by proprietary chemistry.

Host Species: Mouse

Antibody Class: IgM

Preservatives: None. Available on request.

For in vitro investigational use only. Not for use in therapeutic or diagnostic procedures.

SPECIFICITY

This antibody detects lead in the ppb range. Indirect ELISA endpoint titer is >1: 100,000.

APPLICATIONS

Indirect ELISA: optimized for lead-RSA (rabbit serum albumin) on solid phase at 200ng/well. Ascites diluted 1:100,000 produces an O.D. signal of 0.5.

Competition ELISA: with lead-RSA on the solid phase at 200ng/well, 50% inhibition of antibody binding is achieved with Pb²⁺ at 800ng/well.

These are recommended concentrations. Endusers should determine optimal concentrations for their applications. Not all applications have been investigated.

DILUTION INSTRUCTIONS

Dilute in PBS or medium which is identical to that used in the assay system.

STORAGE AND STABILITY

This antibody is stable for at least one (1) year at -20°C. Avoid multiple freeze-thaw cycles.

PRODUCT REFERENCE

Lin TJ and Chung MF 2008 Sensors 8: 582-593. Refers to product no. K55061M which is QED product no. 60001.