

Heme Oxygenase-1 Monoclonal Antibody

ORDERING INFORMATION

Catalog no.: 13060 (clone GTS-1)

Format: 100ug lyophilized purified antibody in 10mM PBS, pH 7.4, 1% BSA.

BACKGROUND

Heme-oxygenase is an enzyme that catalyzes heme catabolism to yield biliverdin, iron, and carbon monoxide (CO). There are three isoforms of heme-oxygenase: HO-1, HO-2, and HO-3. HO-1 and HO-2 have been identified as the two major isoforms in mammals. HO-1, also known as heat shock protein 32 (Hsp32) is induced by most oxidative stress inducers, cytokines, inflammatory agents, and heat shock. HO-1 deficiency appears to cause reduced stress defense, a pro-inflammatory tendency, susceptibility to atherosclerotic lesion formation, endothelial cell injury, and growth retardation. Therefore, up-regulation of HO-1 is one of the major defense mechanisms against oxidative stress.

SPECIFICATION SUMMARY

Antigen: Microsomal fraction of transformed mouse T-cell transfected with rat heme oxygenase-1 (WR19LrHO-1).

Accession no.: NP_036712

Gene ID: 24451

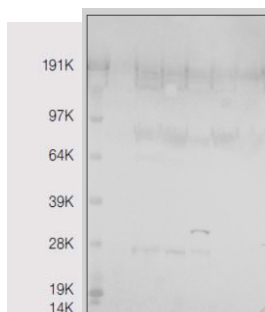
Host Species: Mouse

Antibody Class: IgG1

Specificity: This antibody recognizes human, rat, and mouse HO-1. It does not recognize rabbit HO-1 and does not cross-react with HO-2.

APPLICATIONS

Immunoblotting: use at 5-10ug/ml. A band of ~33kDa is detected.



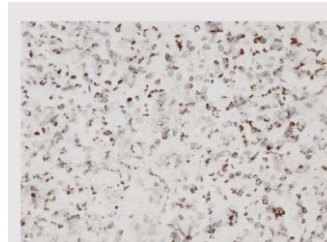
Detection of rat HO-1 with #13060 at 5ug/ml.

Immunohistochemistry: use at 5-10ug/ml on human frozen or paraffin-embedded tissue. Antigen retrieval with 0.4ug/ml Proteinase K.

These are recommended concentrations. Endusers should determine optimal concentrations for their applications.

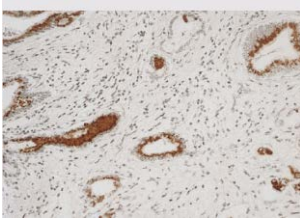


Detection of HO-1 in human small intestine.

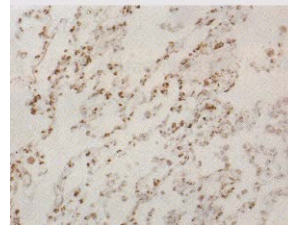


Detection of HO-1 in human pancreas.

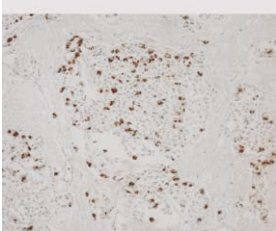
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Detection of HO-1 in human pancreatic carcinoma.



Detection of HO-1 in human lung carcinoma.



Detection of HO-1 in human thyroid carcinoma.

RECONSTITUTION INSTRUCTIONS

Dissolve lyophilized antibody in 50ul of distilled water; final concentration will be 2mg/ml. If further dilution is needed, dilute this stock with 10mM PBS, pH 7.4 + 1% BSA immediately before use.

STORAGE AND STABILITY

Stock solution of 2mg/ml should be stored for one (1) year at -20°C in appropriate aliquots to avoid multiple freeze-thaw cycles or at 4°C for 6 months with the addition of 0.1% sodium azide. Diluted antibody should not be stored.

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