

Anti-Heme-Oxygenase 1 Monoclonal Antibody

ORDERING INFORMATION

Catalog No.: 13061 (clone 1F12.A6)
Size: 100ug in PBS, pH 7.4, purified by Protein G affinity chromatography.

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: Synthetic peptide corresponding to aa 1-30 of human heme-oxygenase 1.
Host Species: Mouse
Antibody Class: IgG1
Preservatives: None

SPECIFICITY

This antibody recognizes human, mouse, and bovine HO-1. Other species have not been tested. It does not cross-react with HO-2.

APPLICATIONS

Immunoblotting: use at 0.5-1ug/ml. A band of ~32 kDa is detected.

ELISA: use at 1ug/ml.

These are recommended concentrations. User should determine optimal concentrations for their application.

Positive control: Human cell line lysates such as A431, A549, HeLa, HepG2, Jurkat, and MCF7.

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 repeated freezing and thawing.

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