

## Heme-Oxygenase 1 (HO-1) Monoclonal Antibody

#### ORDERING INFORMATION

Catalog no.: 13061 (clone 1F12.A6)

Format: 100ug in PBS (1mg/ml), 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 HO-1.

Accession no.: P09601, NP\_002124.1

Host Species: Mouse Antibody Class: IgG1

Specificity: This antibody recognizes human, mouse, and bovine HO-1. It does not cross-react

with HO-2.

#### **APPLICATIONS**

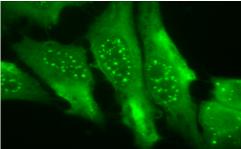
ELISA: use at 1ug/ml with HO-1 on the solid phase. *Immunoblotting:* use at 0.5-1ug/ml. A band

of ~32kDa is detected.



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

Immunofluorescence: use at 5-10ug/ml



Detection of HO-1 in formaldehyde-fixed HeLa cells.

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

#### **DILUTION INSTRUCTIONS**

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



# Heme-Oxygenase 1 (HO-1) Monoclonal Antibody

### STORAGE AND STABILITY

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

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