

HO-1 (human), ELISA kit

Highly sensitive HO-1 ELISA kit enabling detection of HO-1 in cell lysates and tissue extracts in < 2.5 hours.

The HO-1 (human), EIA kit is a colorimetric immunometric enzyme immunoassay kit with results in < 2.5 hours. Absorbance is read at 450 nm. Save time, money, and precious sample with fully quantitative results and increased sensitivity compared to Western blot analysis.

Heme Oxygenase-1 (HO-1) also known as Hsp32, is the inducible isoform of heme oxygenase that catalyzes the NADPH, oxygen, and cytochrome P450 reductase dependent oxidation of heme to carbon monoxide, ferrous iron and biliverdin which is rapidly reduced to bilirubin. These products of the HO reaction have important physiological effects: carbon monoxide is a potent vasodilator and has been implicated to be a physiological regulator of cGMP and vascular tone; biliverdin and its product bilirubin are potent antioxidants; "free" iron increases oxidative stress and regulates the expression of many mRNAs (e.g., DCT-1, ferritin and transferrin receptor) by affecting the conformation of iron regulatory protein (IRP)-1 and its binding to iron regulatory elements (IREs) in the 5'- or 3'- UTRs of the mRNAs. To date, three identified heme oxygenase isoforms are part of the HO system that catalyze heme into biliverdin and carbon monoxide. These are inducible HO-1 or Hsp32, constitutive HO-2 that is abundant in the brain and testis, and HO-3 which is related to HO-2 but is the product of a different gene. The HO system is the rate-limiting step in heme degradation and HO activity decreases the levels of heme which is a well known potent catalyst of lipid peroxidation and oxygen radical formation.

Citations: 66

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Ordering Information

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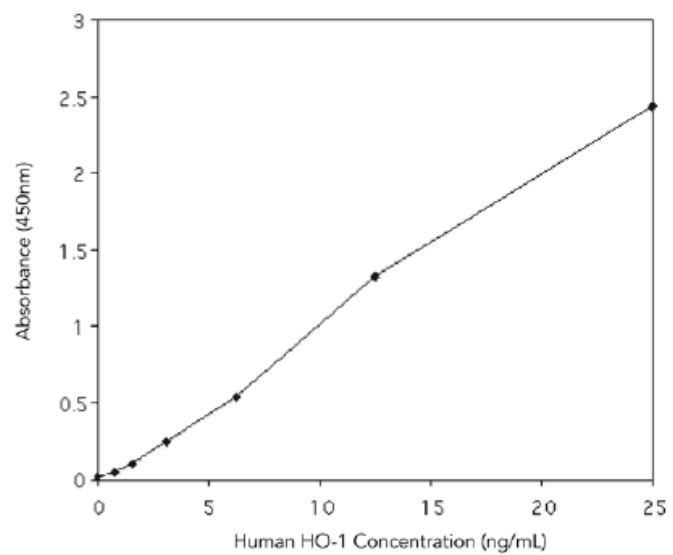
ADI-EKS-800

96 wells

Manuals, SDS & CofA

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- Highly sensitive assay, measure as little as 0.78 ng/ml of HO-1
- Reliable and reproducible results day-after-day and lot-after-lot
- Higher throughput format, assay up to 40 samples in duplicate in just 2.5 hours
- Fully quantitative results that surpass semi-quantitative Western blot analysis



Handling & Storage

Use/Stability Store all components at 4°C, except standard at -20°C.

Shipping Dry Ice

Regulatory Status RUO - Research Use Only

Product Details

Alternative Name Heme oxygenase 1

Application Colorimetric detection, ELISA

Application Notes For the quantitative determination of human heme oxygenase-1 in cell lysates and tissue extracts. Cited sample types include serum and plasma.

Assay Time <2.5 hours

Compatibility This product is compatible with the [Absorbance 96 Plate Reader](#).

Contents Microtiter plate, 5X Extraction reagent, Standard, Sample diluent, Wash buffer concentrate, Antibody, Antibody diluent, HRP Conjugate, Conjugate diluent, TMB Substrate, Stop solution 2

Crossreactivity Human HO-1 (100%). No reactivity with HO-2 or HO-3.

Sensitivity 0.78 ng/ml (range 0.78 – 25 ng/ml)

Species Reactivity Human

UniProt ID P09601

Wavelength 450 nm

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