HO-1 monoclonal antibody (HO-1-2) (FITC conjugate)

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 transferring 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.

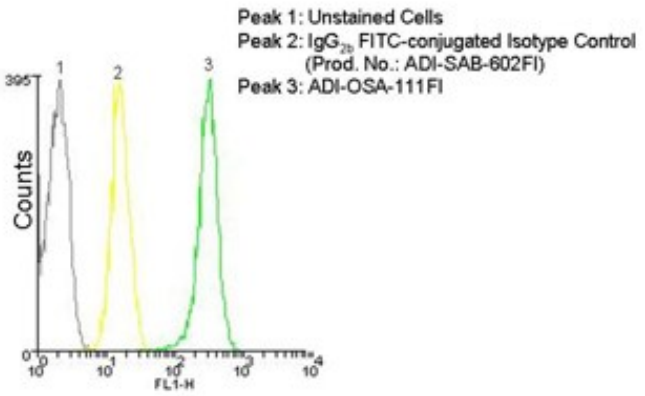
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ADI-OSA-111FI-D	50µg
ADI-OSA-111FI-F	200µg

Manuals, SDS & CofA View Online »



Flow cytometry analysis of 10^6 Jurkat cells were stained using HO-1 mAb (HO-1-2), Fluorescein Conjugate at a concentration of 50µg/ml.

Handling & Storage

Long Term Storage	+4°C
Shipping	Blue Ice

Regulatory Status

RUO - Research Use Only

Product Details

Alternative Name	HMOX1, Hsp32, Heat shock protein 32, Heme oxygenase 1
Application	Flow Cytometry
Application Notes	Detects a band of ~32kDa by Western blot.
Clone	HO-1-2
Formulation	Liquid. In PBS containing 0.09% sodium azide.
GenBank ID	J02722
Host	Mouse
Immunogen	Native rat HO-1.
Isotype	IgG2b
Purity Detail	Protein G affinity purified.
Recommendation Dilutions/Conditions	Flow Cytometry (1:20)Suggested dilutions/conditions may not be available for all applications.Optimal conditions must be determined individually for each application.
Source	Purified from ascites.
Species Reactivity	Dog, Guinea pig, Hamster, Human, Monkey, Mouse, Porcine, Rabbit, Rat
UniProt ID	P06762

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