

Mouse Anti-Heme Oxygenase 2/Hemlet 2 [B3]: MC0216, MC0216RTU7

Intended Use: For Research Use Only

Description: Heme Oxygenases are microsomal enzymes that cleave heme to produce the antioxidant biliverdin, inorganic iron and carbon monoxide (CO). The activity of Heme Oxygenase 1 (HO-1), also designated HSP 32, is highly inducible in response to numerous stimuli, including heme, heavy metals, hormones and oxidative stress. Heme Oxygenase 2, in contrast, appears to be constitutively expressed in mammalian tissues. Heme Oxygenase 2 is involved in the production of carbon monoxide (CO) in brain, where CO is thought to act as a neurotransmitter. The CO signaling system closely parallels the signaling pathway involving nitric oxide, and regulation of the two systems is closely linked. Heme Oxygenase 3 is found in the spleen, liver, thymus, prostate, heart, kidney, brain and testis. A poor Heme catalyst, Heme Oxygenase 3 has two heme regulatory motifs that may be involved in Heme binding.

Specifications:

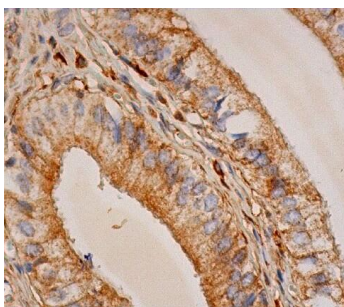
Clone: B3
 Source: Mouse
 Isotype: IgG1k
 Reactivity: Human, mouse, rat
 Immunogen: Human Heme Oxygenase 2 C-terminus aa 239-311
 Localization: Cytoplasm, membrane
 Formulation: Antibody in PBS pH7.4, containing BSA and $\leq 0.09\%$ sodium azide (NaN₃)
 Storage: Store at 2°- 8°C
 Applications: IHC, ELISA, ICC/IF, IP, WB
 Package:

Description	Catalog No.	Size
Heme Oxygenase 2/Hemlet 2 Concentrated	MC0216	1 ml
Heme Oxygenase 2/Hemlet 2 Prediluted	MC0216RTU7	7 ml

IHC Procedure*:

Positive Control Tissue: Gall bladder
 Concentrated Dilution: 50-200
 Pretreatment: Citrate pH6.0 or EDTA pH8.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C
 Incubation Time and Temp: 30-60 minutes @ RT
 Detection: Refer to the detection system manual

* Result should be confirmed by an established diagnostic procedure.



FFPE human gall bladder tissue stained with anti-Hemlet 2 using DAB showing staining of glandular cells

References:

1. Capsaicin induces heme oxygenase-1 expression in HepG2 cells via activation of PI3K-Nrf2 signaling: NAD(P)H:quinone oxidoreductase as a potential target. Eun-Joo Jung, et al. Antioxid Redox Signal. Dec;9(12):2087-98, 2007.
2. Hemoglobin scavenger receptor CD163 mediates interleukin-10 release and heme oxygenase-1 synthesis: antiinflammatory monocyte-macrophage responses in vitro, in resolving skin blisters in vivo, and after cardiopulmonary bypass surgery. P Philippidis, et al. Circ Res. Jan 9;94(1):119-26, 2004.

Doc. 100-MC0216

Rev. A