

# **Goat Anti-HMOX2 Antibody**

Peptide-affinity purified goat antibody Catalog # AF1534a

### **Specification**

# **Goat Anti-HMOX2 Antibody - Product Information**

Application WB, IHC, E
Primary Accession P30519

Other Accession <u>NP\_002125</u>, <u>3163</u>, <u>15369 (mouse)</u>

Reactivity
Predicted
Host
Clonality
Concentration
Human
Mouse
Goat
Polyclonal
100ug/200ul

Isotype IgG
Calculated MW 36033

# **Goat Anti-HMOX2 Antibody - Additional Information**

**Gene ID 3163** 

# **Other Names**

Heme oxygenase 2, HO-2, 1.14.99.3, HMOX2, HO2

### **Dilution**

WB~~1:1000 IHC~~1:100~500

E~~N/A

# **Format**

0.5 mg lgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

Goat Anti-HMOX2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

# Goat Anti-HMOX2 Antibody - Protein Information

Name HMOX2

Synonyms HO2



### **Function**

[Heme oxygenase 2]: Catalyzes the oxidative cleavage of heme at the alpha-methene bridge carbon, released as carbon monoxide (CO), to generate biliverdin IXalpha, while releasing the central heme iron chelate as ferrous iron.

### **Cellular Location**

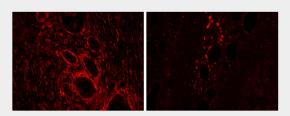
Microsome membrane; Single-pass type IV membrane protein; Cytoplasmic side {ECO:0000250|UniProtKB:P09601}. Endoplasmic reticulum membrane {ECO:0000250|UniProtKB:P09601}; Single-pass type IV membrane protein; Cytoplasmic side {ECO:0000250|UniProtKB:P09601}

# **Goat Anti-HMOX2 Antibody - Protocols**

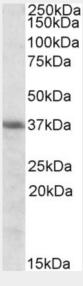
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# Goat Anti-HMOX2 Antibody - Images



AF1534a (2  $\mu$ g/ml) staining of paraffin embedded Human Pancreas: cancer (left), adjacent to cancer (right). Steamed antigen retrieval with citrate buffer pH 6, Alexa594-staining.



AF1534a (0.3 μg/ml) staining of K562 cell lysate (35 μg protein in RIPA buffer). Primary incubation



was 1 hour. Detected by chemiluminescence.

# Goat Anti-HMOX2 Antibody - Background

Heme oxygenase, an essential enzyme in heme catabolism, cleaves heme to form biliverdin, which is subsequently converted to bilirubin by biliverdin reductase, and carbon monoxide, a putative neurotransmitter. Heme oxygenase activity is induced by its substrate heme and by various nonheme substances. Heme oxygenase occurs as 2 isozymes, an inducible heme oxygenase-1 and a constitutive heme oxygenase-2. HMOX1 and HMOX2 belong to the heme oxygenase family. Alternative splice variants encoding the same protein have been identified at this locus.

# Goat Anti-HMOX2 Antibody - References

Common polymorphisms in ITGA2, PON1 and THBS2 are associated with coronary atherosclerosis in a candidate gene association study of the Chinese Han population. Wang Y, et al. J Hum Genet, 2010 Aug. PMID 20485444.

Enhanced translation of heme oxygenase-2 preserves human endothelial cell viability during hypoxia. He JZ, et al. J Biol Chem, 2010 Mar 26. PMID 20118244.

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A role for Bach1 and HO-2 in suppression of basal and UVA-induced HO-1 expression in human keratinocytes. Zhong JL, et al. Free Radic Biol Med, 2010 Jan 15. PMID 19874887.

Defining the human deubiquitinating enzyme interaction landscape. Sowa ME, et al. Cell, 2009 Jul 23. PMID 19615732.