

Anti-HO-1 Monoclonal Antibody (HO-1-2)

Catalog Number: M00253-1

About Hmox1

Anti Apolipoprotein C-III antibody recognizes the gene product of APOC. Apolipoprotein C-III is a protein component of very low density lipoprotein (VLDL). APOC3 inhibits lipoprotein lipase and hepatic lipase; it is thought to inhibit hepatic uptake of triglyceride-rich particles. The APOA1, APOC3 and APOA4 genes are closely linked in both rat and human genomes. The A-I and A-IV genes are transcribed from the same strand, while the A-1 and C-III genes are convergently transcribed. An increase in apoC-III levels induces the development of hypertriglyceridemia. This antibody is suitable for cardiovascular research.

Overview

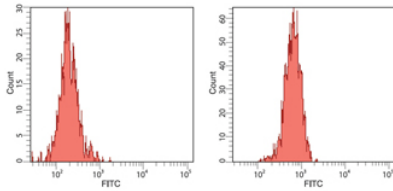
Product Name	Anti-HO-1 Monoclonal Antibody (HO-1-2)
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-HO-1 Monoclonal Antibody (HO-1-2) catalog # M00253-1. Tested in Flow Cytometry, IHC, WB applications. This antibody reacts with Human, Mouse, Rat.
Conjugate	FITC
Application	Flow Cytometry, IHC, WB
Clonality	Monoclonal HO-1-2
Formulation	Liquid. In PBS, pH 7.2, containing 50% glycerol and 0.09% sodium azide.
Storage Instructions	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.
Host	Mouse
Uniprot ID	P06762

Technical Details

Immunogen	Native rat HO-1.
Predicted Reactive Species	Bovine, Goat, Guinea Pig, Hamster, Monkey, Sheep
Cross Reactivity	Detects ~20kDa. Does not cross-react with alphaB-crystallin, betaL-crystallin, ̢H-crystallin, gamma-crystallin, HSP25, HSP27 or HSP47 proteins.
Isotype	IgG
Form	Liquid. In PBS, pH 7.2, containing 50% glycerol and 0.09% sodium azide.
Concentration	0.5-1mg/ml, actual concentration vary by lot. Use suggested dilution ratio to decide dilution procedure.

Purification	Protein G affinity purified.
Suggested Dilutions	Dilute the sample so that the expected range of concentrations fall within the detection range of this kit. If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples. Some PubMed article(s) citing the expression level of this target are as follows: Boster Bio's internal QC testing used: Flow Cytometry (1:100) Western Blot (1:1,000) Suggested dilutions/conditions may not be available for all applications. Optimal conditions must be determined individually for each application.

Anti-HO-1 Monoclonal Antibody (HO-1-2) (M00253-1) Images



Flow cytometry analysis of human lung cancer A2 cells stained using isotype control antibody (left) and HO-1 (Hsp32) mAb (HO -1-2) (right).

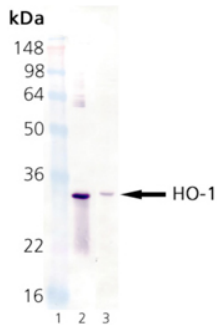


Figure 1. Western blot analysis of Hmox1 using anti-Hmox1 antibody (M00253-1).

Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.

After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Hmox1 antigen affinity purified polyclonal antibody (Catalog # M00253-1) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-Mouse IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # SA1021) with Tanon 5200 system. A specific band was detected for Hmox1.

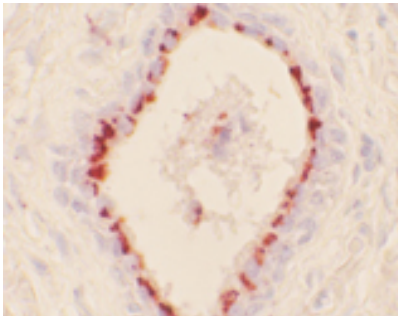


Figure 3. IHC analysis of Hmox1 using anti-Hmox1 antibody (M00253-1).

Hmox1 was detected in paraffin-embedded section. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-Hmox1 Antibody (M00253-1) overnight at 4°C. Biotinylated goat anti Mouse IgG antibody was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1021) with DAB as the chromogen.

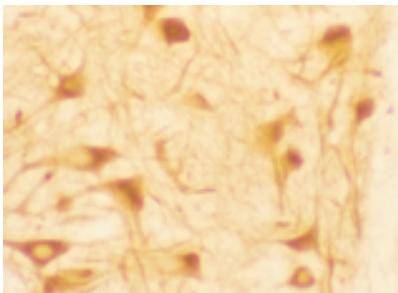


Figure 4. IHC analysis of Hmox1 using anti-Hmox1 antibody (M00253-1).

Hmox1 was detected in paraffin-embedded section. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-Hmox1 Antibody (M00253-1) overnight at 4°C. Biotinylated goat anti Mouse IgG antibody was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1021) with DAB as the chromogen.

19 Publications Citing This Product

1. PubMed ID: 34082111, Dong H, Hao L, Zhang W, Zhong W, Guo W, Yue R, Sun X, Zhou Z. Activation of AhR-NQO1 signaling pathway protects against alcohol-induced liver injury by improving redox balance. *Cell Mol Gastroenterol Hepatol*. 2021 May 31;S2352-345X(21)00102-8. doi:10.1016/j.jcmgh.2021.05.013. Epub ahead of print. PMID:34082111.
2. PubMed ID: 33508367, Sun S, Zhang J, Li H, Du Y, Li S, Li A, Suo X, Wang Y, Sun Q. Anti-inflammatory activity of the water extract of *Chloranthus serratus* roots in LPS-stimulated RAW264.7 cells mediated by the Nrf2/HO-1, MAPK and NF-kappaB signaling pathways. *J Ethnopharmacol*. 2021 Jan 25;1
3. PubMed ID: 33359640, Li D, Bai X, Jiang Y, Cheng Y. Butyrate alleviates PTZ-induced mitochondrial dysfunction, oxidative stress and neuron apoptosis in mice via Keap1/Nrf2/HO-1 pathway. *Brain Res Bull*. 2020 Dec 28;168:25-35. doi:10.1016/j.brainresbull.2020.12.009. Epub ahead of print

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