

HEPH Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant HEPH. Catalog # AT2350a

Specification

HEPH Antibody (monoclonal) (M01) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW WB, E <u>O9BOS7</u> <u>NM_138737</u> Human mouse Monoclonal IgG2a Kappa 130449

HEPH Antibody (monoclonal) (M01) - Additional Information

Gene ID 9843

Other Names Hephaestin, 1---, HEPH, KIAA0698

Target/Specificity HEPH (NP_620074, 315 a.a. ~ 424 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

Dilution WB~~1:500~1000 E~~N/A

Format Clear, colorless solution in phosphate buffered saline, pH 7.2 .

Storage Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Precautions HEPH Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

HEPH Antibody (monoclonal) (M01) - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot



- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

HEPH Antibody (monoclonal) (M01) - Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (37.84 KDa) .



Detection limit for recombinant GST tagged HEPH is approximately 0.3ng/ml as a capture antibody.

HEPH Antibody (monoclonal) (M01) - Background

The protein encoded by this gene is similar to an iron transport protein found in mouse. The mouse protein is similar to ceruloplasmin, a serum multi-copper ferroxidase, and is thought to be a membrane-bound protein responsible for transport of dietary iron from epithelial cells of the intestinal lumen into the circulatory system. In mouse, defects in this gene can lead to severe microcytic anemia. Three transcript variants encoding different isoforms have been described for this gene.

HEPH Antibody (monoclonal) (M01) - References

Examination of genetic polymorphisms in newborns for signatures of sex-specific prenatal selection. Ucisik-Akkaya E, et al. Mol Hum Reprod, 2010 Oct. PMID 20587610.Human hephaestin expression is not limited to enterocytes of the gastrointestinal tract but is also found in the antrum, the enteric nervous system, and pancreatic {beta}-cells. Hudson DM, et al. Am J Physiol Gastrointest Liver Physiol, 2010 Mar. PMID 20019163.Decreased hephaestin expression and activity leads to decreased iron efflux from differentiated Caco2 cells. Chen H, et al. J Cell Biochem, 2009 Jul 1. PMID 19452451.Neither human hephaestin nor ceruloplasmin forms a stable complex with



transferrin. Hudson DM, et al. J Cell Biochem, 2008 Apr 15. PMID 18022819.Colocalization of ferroportin-1 with hephaestin on the basolateral membrane of human intestinal absorptive cells. Han O, et al. J Cell Biochem, 2007 Jul 1. PMID 17486601.