

HFE Antibody

Purified Mouse Monoclonal Antibody Catalog # AO1622a

Specification

HFE Antibody - Product Information

Application E, WB, IF
Primary Accession Q30201
Reactivity Human
Host Mouse
Clonality Monoclonal
Isotype IgG1
Calculated MW 40kDa KDa

Description

The protein encoded by this gene is a membrane protein that is similar to MHC class I-type proteins and associates with beta2-microglobulin (beta2M). It is thought that this protein functions to regulate iron absorption by regulating the interaction of the transferrin receptor with transferrin. The iron storage disorder, hereditary haemochromatosis, is a recessive genetic disorder that results from defects in this gene. At least nine alternatively spliced variants have been described for this gene. Additional variants have been found but their full-length nature has not been determined.

Immunogen

Purified recombinant fragment of human HFE expressed in E. Coli.

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Formulation

Ascitic fluid containing 0.03% sodium azide.

HFE Antibody - Additional Information

Gene ID 3077

Other Names

Hereditary hemochromatosis protein, HLA-H, HFE, HLAH

Dilution

E~~1/10000 WB~~1/500 - 1/2000 IF~~1/200 - 1/1000

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

HFE Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

HFE Antibody - Protein Information



Name HFE

Synonyms HLAH

Function

Binds to transferrin receptor (TFR) and reduces its affinity for iron-loaded transferrin.

Cellular Location

Cell membrane; Single-pass type I membrane protein

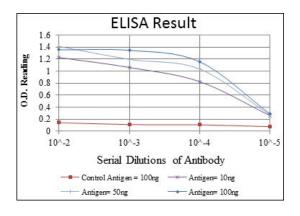
Tissue Location

Expressed in all tissues tested except brain.

HFE 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
- Immunoprecipitation
- Flow Cytomety
- Cell Culture





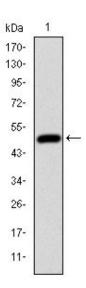


Figure 1: Western blot analysis using HFE mAb against human HFE (AA: 125-282) recombinant protein. (Expected MW is 44 kDa)

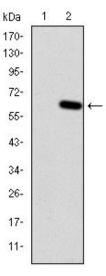
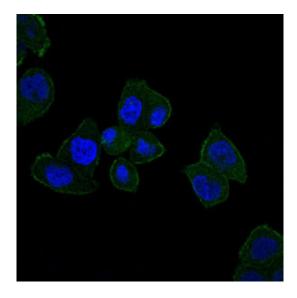


Figure 2: Western blot analysis using HFE mAb against HEK293 (1) and HFE(AA: 125-282)-hlgGFc transfected HEK293 (2) cell lysate.





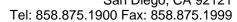




Figure 3: Immunofluorescence analysis of HepG2 cells using HFE mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye.

HFE Antibody - References

1. Respir Med. 2009 Dec;103(12):1866-70. 2. Clin J Am Soc Nephrol. 2009 Aug;4(8):1331-7.