

Rabbit anti-Mouse, Rat Hfe Polyclonal Antibody | anti-Hfe antibody

Anti-Hfe Antibody Picoband

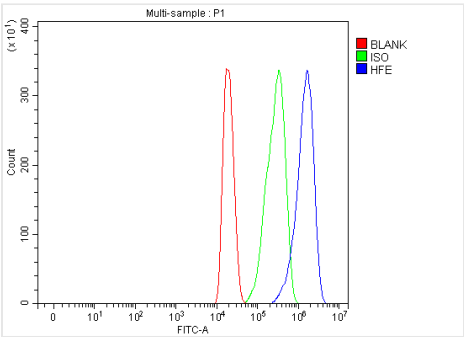
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA126993	Rabbit	Mouse, Rat	ELISA, Flow Cytometry, Functional Assay, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

Hfe; Polyclonal Antibody; Anti-Hfe Antibody Picoband; Hereditary hemochromatosis protein; HLA-H; HFE; HLAH; anti-Hfe antibody

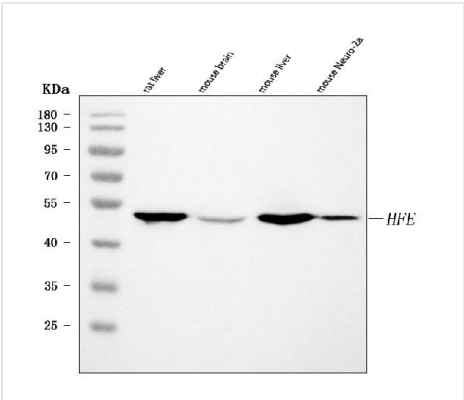
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Mouse, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Expressed in all tissues tested except brain.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ .
Applicable Applications for anti-Hfe antibody	ELISA, FCM/FACS (Flow Cytometry), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	E coli-derived mouse Hfe recombinant protein (Position: N112-H227).
Subcellular Localization	Cell membrane, Single-pass type I membrane protein
Reconstitution	Adding 0.2 ml of distilled water will yield a concentration of 500ug/ml.
Cross Reactivity	No cross-reactivity with other proteins.
Protein Function	Binds to transferrin receptor (TFR) and reduces its affinity for iron-loaded transferrin.
Preparation and Storage	At -20 degree C for one year from date of receipt. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for six months.Avoid repeated freezing and thawing.



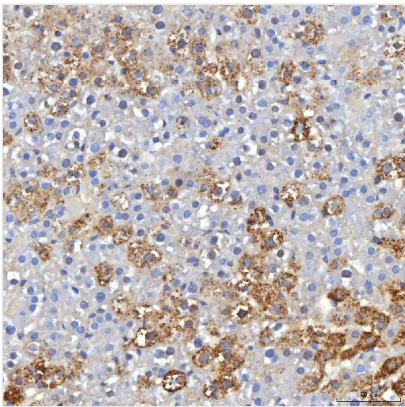
FCM/FACS (Flow Cytometry)

Figure 3. Flow Cytometry analysis of HEPA1-6 cells using anti-Hfe antibody (AAA126993).Overlay histogram showing HEPA1-6 cells stained with AAA126993 (Blue line). The cells were fixed with 4% paraformaldehyde and blocked with 10% normal goat serum. And then incubated with rabbit anti-Hfe Antibody (AAA126993, 1ug/1x10⁶ cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x10⁶) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.



WB (Western Blot)

Figure 1. Western blot analysis of Hfe using anti-Hfe antibody (AAA126993).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 30 ug of sample under reducing conditions.Lane 1: rat liver tissue lysates,Lane 2: mouse brain tissue lysates,Lane 3: mouse liver tissue lysates,Lane 4: mouse Neuro-2a whole cell lysates.After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA 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-Hfe antigen affinity purified polyclonal antibody (#AAA126993) at 0.5ug/mL overnight at 4 degree C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for Hfe at approximately 40-58 kDa. The expected band size for Hfe is at 41 kDa.



IHC (Immunohistochemistry)

Figure 2. IHC analysis of Hfe using anti-Hfe antibody (AAA126993).Hfe was detected in a paraffin-embedded section of rat liver tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-Hfe Antibody (AAA126993) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit with DAB as the chromogen.

ADDITIONAL INFORMATION

Related Product Information for anti-Hfe antibody	The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Product Categories/Family for anti-Hfe antibody	Primary Antibodies; Cofactors; Vitamins/Minerals; Hematopoietic Progenitors; Metabolism; Myeloid; Pathways and Processes; Signal Transduction; Stem Cells; Vitamins/Minerals

References	1. Aguilar-Martinez, P., Bismuth, M., Picot, M. C., Thelcide, C., Pageaux, G.-P., Blanc, F., Blanc, P., Schved, J.-F., Larrey, D. Variable phenotypic presentation of iron overload in H63D homozygotes: are genetic modifiers the cause? Gut 48: 836-842, 2001. 2. Allen, K. J., Gurrin, L. C., Constantine, C. C., Osborne, N. J., Delatycki, M. B., Nicoll, A. J., McLaren, C. E., Bahlo, M., Nisselle, A. E., Vulpe, C. D., Anderson, G. J., Southey, M. C., Giles, G. G., English, D. R., Hopper, J. L., Olynyk, J. K., Powell, L. W., Gertig, D. M. Iron-overload-related disease in HFE hereditary hemochromatosis. New Eng. J. Med. 358: 221-230, 2008. 3. Andersen, R. V., Tybjaerg-Hansen, A., Appleyard, M., Birgens, H., Nordestgaard, B. G. Hemochromatosis mutations in the general population: iron overload progression rate. Blood 103: 2914-2919, 2004.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	31981697
NCBI GeneID	15216
NCBI Accession #	NP_034554.2
NCBI GenBank Nucleotide #	NM_010424.4
UniProt Accession #	P70387; Q14AQ5; Q5SZ90; Q9D754
Molecular Weight	40,534 Da
NCBI Official Full Name	hereditary hemochromatosis protein homolog
NCBI Official Synonym Full Names	hemochromatosis
NCBI Official Symbol	Hfe
NCBI Official Synonym Symbols	MR2
NCBI Protein Information	hereditary hemochromatosis protein homolog
UniProt Protein Name	Hereditary hemochromatosis protein homolog
UniProt Gene Name	Hfe
UniProt Synonym Gene Names	Mr2
UniProt Entry Name	HFE_MOUSE

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