

Anti-Hfe Antibody Picoband®

Catalog Number: A00506-5

About Hfe

Human homeostatic iron regulator protein, also known as the HFE protein (High FE2+), is a protein which in humans is encoded by the HFE gene. Enables transferrin receptor binding activity. Involved in positive regulation of gene expression. Acts upstream of or within hormone biosynthetic process and multicellular organismal iron ion homeostasis. Part of HFE-transferrin receptor complex. Is expressed in brain; choroid invagination; diencephalon roof plate; medulla oblongata part of 4th ventricle choroid plexus; and metencephalon part of 4th ventricle choroid plexus. Used to study hemochromatosis type 1. Human ortholog(s) of this gene implicated in several diseases, including acute porphyria (multiple); arthritis (multiple); bone marrow cancer (multiple); hemochromatosis (multiple); and liver disease (multiple). Orthologous to human HFE (homeostatic iron regulator).

Submit a product review to Biocompare.com

[Submit a review of this product](#) to Biocompare.com to receive a \$20 Amazon.com giftcard! Your reviews help your fellow scientists make the right decisions. Thank you for your contribution.



Overview

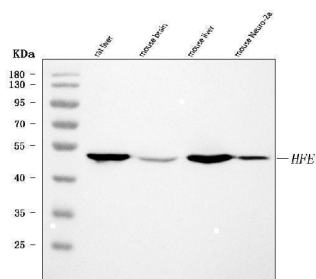
Product Name	Anti-Hfe Antibody Picoband®
Reactive Species	Mouse, Rat
Description	Boster Bio Anti-Hfe Antibody Picoband® catalog # A00506-5. Tested in ELISA, Flow Cytometry, IHC, WB applications. This antibody reacts with Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees 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.
Application	ELISA, Flow Cytometry, IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ .
Storage Instructions	At -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freezing and thawing.
Host	Rabbit
Uniprot ID	P70387

Technical Details

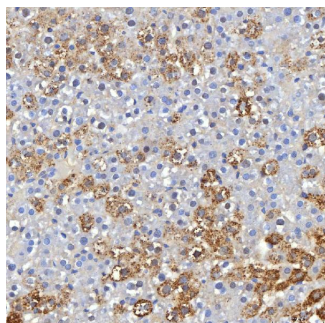
Immunogen	E.coli-derived mouse Hfe recombinant protein (Position: N112-H227).
-----------	---

Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P).
Cross Reactivity	No cross-reactivity with other proteins.
Isotype	Rabbit IgG
Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 µg/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Western blot, 0.25-0.5 ug/ml, Mouse, Rat Immunohistochemistry(Paraffin-embedded Section), 2-5 ug/ml, Rat Flow Cytometry (Fixed), 1-3 ug/1x10⁶ cells, Mouse ELISA, 0.1-0.5 ug/ml, - Note: For flow cytometry (FCM), validated for fixed cells only. Not validated for FACS or surface flow cytometry using live cells.

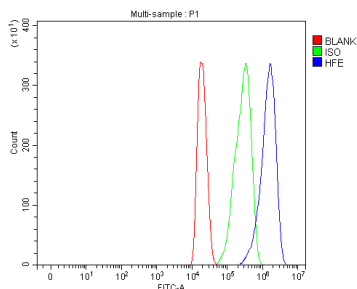
Anti-Hfe Antibody Picoband® (A00506-5) Images



Western blot analysis of Hfe using anti-Hfe antibody (A00506-5). 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 (Catalog # A00506-5) 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-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 (Catalog # EK1002) 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 analysis of Hfe using anti-Hfe antibody (A00506-5). 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 2 ug/ml rabbit anti-Hfe Antibody (A00506-5) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.



Flow Cytometry analysis of HEPA1-6 cells using anti-Hfe antibody (A00506-5). Overlay histogram showing HEPA1-6 cells stained with A00506-5 (Blue line). The cells were fixed with 4% paraformaldehyde and blocked with 10% normal goat serum. And then incubated with rabbit anti-Hfe Antibody (A00506-5, 1 ug/1x10⁶ cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10 ug/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1 ug/1x10⁶) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.

For Research Use Only. Not for use in diagnostic procedures.