

Anti-HFE Picoband Antibody

Catalog # ABO10085

Product Information

Application	WB
Primary Accession	Q30201
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Hereditary hemochromatosis protein(HFE) detection. Tested with WB in Human.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	3077
Other Names	Hereditary hemochromatosis protein, HLA-H, HFE, HLAH
Calculated MW	40108
Application Details	Western blot, 0.1-0.5 µg/ml, Human
Subcellular Localization	Cell membrane ; Single-pass type I membrane protein .
Tissue Specificity	Expressed in all tissues tested except brain.
Source	Eukaryota
Protein Name	Hereditary hemochromatosis protein
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Immunogen	E.coli-derived human HFE recombinant protein (Position: Q82-R199). Human HFE shares 72.2% and 74.6% amino acid (aa) sequence identity with mouse and rat HFE, respectively.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins.
Storage	At -20 °C for one year. After reconstitution, at 4 °C for one month. It can also be aliquotted and stored frozen at -20 °C for a longer time. Avoid repeated freezing and thawing.

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.

Background

Human hemochromatosis protein also known as the HFE protein is a protein which in humans is encoded by the HFE gene. The HFE gene is located on short arm of chromosome 6 at location 6p21.3. 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.

Images

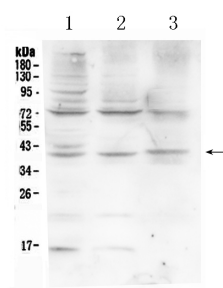


Figure 1. Western blot analysis of HFE using anti-HFE antibody (ABO10085). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: HELA whole Cell lysates, Lane 2: HEPG2 whole Cell lysates, Lane 3: A431 whole Cell lysates. 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-HFE antigen affinity purified polyclonal antibody (Catalog # ABO10085) at 0.5 μ g/mL overnight at 4 $^{\circ}$ 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 1:10000 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 40KD. The expected band size for HFE is at 40KD.

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