Datasheet for ABIN5518842

anti-HFE antibody (AA 82-199)

1 Image

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Overview

Quantity:	100 µg
Target:	HFE
Binding Specificity:	AA 82-199
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This HFE antibody is un-conjugated
Application:	Western Blotting (WB)

Product Details

Purpose:	Anti-HFE Antibody Picoband®
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.
Isotype:	IgG
Cross-Reactivity (Details):	No cross-reactivity with other proteins.
Characteristics:	Anti-HFE Antibody Picoband® (ABIN5518842). Tested in WB applications. This antibody reacts with Human. 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.
Purification:	Immunogen affinity purified.

Target Details

Target:	HFE
Alternative Name:	HFE (HFE Products)
Background:	Synonyms: Hereditary hemochromatosis protein,HLA-H,HFE,HLAH, Tissue Specificity: 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.
Molecular Weight:	40 kDa
Gene ID:	3077
UniProt:	Q30201
Pathways:	Transition Metal Ion Homeostasis, Regulation of Leukocyte Mediated Immunity, Positive Regulation of Immune Effector Process

Application Details

Application Notes:	Western blot, 0.1-0.5 µg/mL, Human 1. Martins, R, Silva, B, Proen99a, D, Faustino, P (3 March 2011). "Differential HFE gene expression is regulated by alternative splicing in human tissues". PLOS ONE. 6 (3): e17542. 2. Waheed, A, Parkkila, S, Saarnio, J, Fleming, RE, Zhou, XY, Tomatsu, S, Britton, RS, Bacon, BR, Sly, WS (16 February 1999). "Association of HFE protein with transferrin receptor in crypt enterocytes of human duodenum". Proceedings of the National Academy of Sciences of the United States of America. 96 (4): 1579-84.
Comment:	Antibody can be supported by chemiluminescence kit ABIN921124 in WB.
Restrictions:	For Research Use only

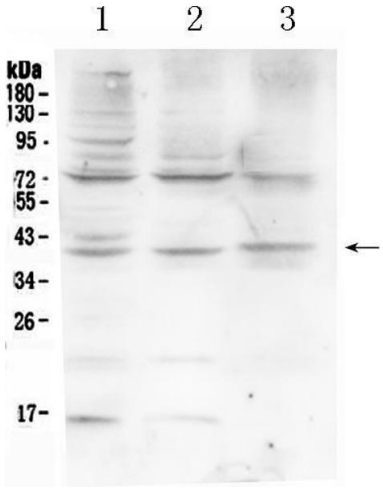
Handling

Format:	Lyophilized
Reconstitution:	Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.

Handling

Concentration:	500 µg/mL
Buffer:	Each vial contains 5 mg BSA, 0.9 mg NaCl, 0.2 mg Na2HPO4, 0.05 mg Sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Store 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 freeze-thaw cycles.

Images



Western Blotting

Image 1. Western blot analysis of HFE using anti-HFE antibody . 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 #) at 0.5 µg/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 1:10000 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 40KD. The expected band size for HFE is at 40KD.