

Product datasheet

Anti-HFE antibody [EPR6751(2)] ab133639

Recombinant RabMAb

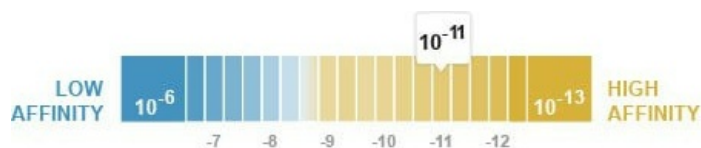
★★★★★ [2 Abreviews](#) [1 References](#) [4 Images](#)

Overview

Product name	Anti-HFE antibody [EPR6751(2)]
Description	Rabbit monoclonal [EPR6751(2)] to HFE
Host species	Rabbit
Tested applications	Suitable for: WB Unsuitable for: Flow Cyt, ICC/IF or IHC-P
Species reactivity	Reacts with: Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	HeLa, A375 and Caco-2 cell lysates
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p> <p>Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
Dissociation constant (K_D)	K _D = 2.30 x 10 ⁻¹¹ M



[Learn more about K_D](#)

Storage buffer	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture supernatant
Purity	Tissue culture supernatant
Clonality	Monoclonal
Clone number	EPR6751(2)
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab133639 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB	★★★★★ (2)	1/1000 - 1/10000. Predicted molecular weight: 40 kDa.

Application notes Is unsuitable for Flow Cyt, ICC/IF or IHC-P.

Target

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

Tissue specificity Expressed in all tissues tested except brain.

Involvement in disease Defects in HFE are a cause of hemochromatosis (HFE) [MIM:235200]. A disorder of iron metabolism characterized by iron overload. Excess iron is deposited in a variety of organs leading to their failure, and resulting in serious illnesses including cirrhosis, hepatomas, diabetes, cardiomyopathy, arthritis, and hypogonadotropic hypogonadism. Severe effects of the disease usually do not appear until after decades of progressive iron loading.

Defects in HFE are associated with variegate porphyria (VP) [MIM:176200]. Porphyrins are inherited defects in the biosynthesis of heme, resulting in the accumulation and increased excretion of porphyrins or porphyrin precursors. They are classified as erythropoietic or hepatic, depending on whether the enzyme deficiency occurs in red blood cells or in the liver. VP is the most common form of porphyria in South Africa. It is characterized by skin hyperpigmentation and hypertrichosis, abdominal pain, tachycardia, hypertension and neuromuscular disturbances. High fecal levels of protoporphyrin and coproporphyrin, increased urine uroporphyrins and iron overload are typical markers of the disease. Note=Iron overload due to HFE mutations is a precipitating or exacerbating factor in variegate porphyria.

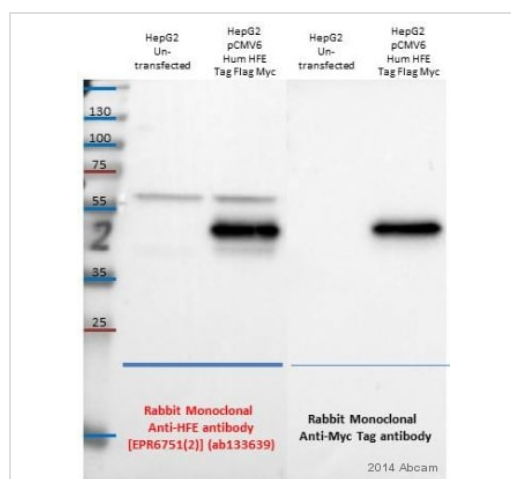
Defects in HFE are associated with susceptibility to microvascular complications of diabetes type 7 (MVCD7) [MIM:612635]. These are pathological conditions that develop in numerous tissues and organs as a consequence of diabetes mellitus. They include diabetic retinopathy, diabetic nephropathy leading to end-stage renal disease, and diabetic neuropathy. Diabetic retinopathy remains the major cause of new-onset blindness among diabetic adults. It is characterized by vascular permeability and increased tissue ischemia and angiogenesis.

Sequence similarities Belongs to the MHC class I family.

Contains 1 Ig-like C1-type (immunoglobulin-like) domain.

Cellular localization Membrane.

Images



Western blot - Anti-HFE antibody [EPR6751(2)]
(ab133639)

This image is courtesy of an Abreview submitted by
Chloe Latour

Lanes 1-2 : Anti-HFE antibody [EPR6751(2)] (ab133639) at
1/1000 dilution

Lanes 3-4 : Rabbit monoclonal anti-myc tag

Lanes 1 & 3 : HepG2 whole cell lysate - untransfected

Lanes 2 & 4 : HepG2 whole cell lysate - transfected with pCMV6
human HFE Tag Flag Myc

Lysates/proteins at 25 µg per lane.

Secondary

All lanes : HRP-conjugated anti-rabbit IgG polyclonal at 1/10000
dilution

Developed using the ECL technique.

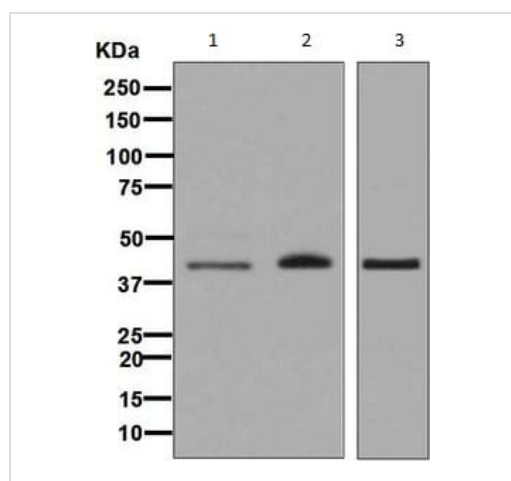
Performed under reducing conditions.

Predicted band size: 40 kDa

Observed band size: 40 kDa

Additional bands at: 60 kDa (possible non-specific binding)

Exposure time: 5 seconds



Western blot - Anti-HFE antibody [EPR6751(2)]
(ab133639)

All lanes : Anti-HFE antibody [EPR6751(2)] (ab133639) at 1/1000
dilution

Lane 1 : HeLa cell lysate

Lane 2 : A375 cell lysate

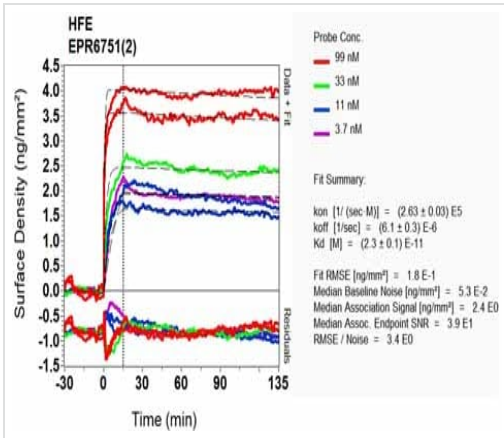
Lane 3 : Caco-2 cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : HRP labelled goat anti-rabbit at 1/2000 dilution

Predicted band size: 40 kDa







OI-RD Scanning - Anti-HFE antibody [EPR6751(2)]
(ab133639)

Equilibrium disassociation constant (K_D)

Learn more about K_D

[Click here to learn more about \$K_D\$](#)

Why choose a recombinant antibody?

 <p>Research with confidence Consistent and reproducible results</p>	 <p>Long-term and scalable supply Recombinant technology</p>
 <p>Success from the first experiment Confirmed specificity</p>	 <p>Ethical standards compliant Animal-free production</p>

Anti-HFE antibody [EPR6751(2)] (ab133639)

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