abcam

Product datasheet

Anti-HFE antibody [EPR6750] - BSA and Azide free ab249584



2 Images

Overview

Product name Anti-HFE antibody [EPR6750] - BSA and Azide free

Description Rabbit monoclonal [EPR6750] to HFE - BSA and Azide free

Host species Rabbit

Tested applications Suitable for: WB

Unsuitable for: ICC/IF,IHC-P or IP

Species reactivity Reacts with: Human

Immunogen Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

Positive control WB: HeLa, A375 and A431 cell lysates.

General notes ab249584 is the carrier-free version of ab170912.

> Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for

increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cellbased assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar[®] Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

1

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C. Do Not Freeze.

Storage buffer pH: 7.2

Constituent: PBS

Carrier free Yes

Purity Affinity purified

Clonality Monoclonal

Clone number EPR6750

Isotype IgG

Applications

The Abpromise guarantee

Our Abpromise quarantee covers the use of ab249584 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		Use at an assay dependent concentration. Predicted molecular weight: 40 kDa.

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

Target

Function

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

Tissue specificity

Involvement in disease

Expressed in all tissues tested except brain.

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]. Porphyrias 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

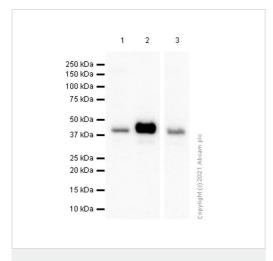
vascular permeability and increased tissue ischemia and angiogenesis.

Sequence similaritiesBelongs to the MHC class I family.

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

Cellular localization Membrane.

Images



Western blot - Anti-HFE antibody [EPR6750] - BSA and Azide free (ab249584)

All lanes : Anti-HFE antibody [EPR6750] (<u>ab170912</u>) at 1/1000 dilution

Lane 1 : HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate

Lane 2: A431 (Human epidermoid carcinoma epithelial cell) whole cell lysate

Lane 3: A375 (Human malignant melanoma epithelial cell) whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

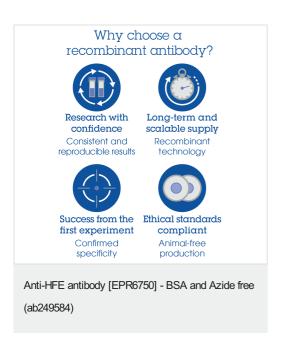
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (<u>ab97051</u>) at 1/20000 dilution

Predicted band size: 40 kDa **Observed band size:** 40 kDa

This data was developed using <u>ab170912</u>, the same antibody clone in a different buffer formulation.

Blocking buffer and concentration: 5% NFDM/TBST.

Diluting buffer and concentration: 1% BSA/TBST.



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