abcam

Product datasheet

Anti-Fukutin antibody [EPR7913] ab131280

Recombinant RabMAb

3 References 3 Images

Overview

Product name	Anti-Fukutin antibody [EPR7913]
Description	Rabbit monoclonal [EPR7913] to Fukutin
Host species	Rabbit
Tested applications	**Suitable for:** WB, IHC-P **Unsuitable for:** Flow Cyt or IP
Species reactivity	**Reacts with:** Mouse, Rat, Human
Immunogen	Synthetic peptide within Human Fukutin aa 400-500. The exact sequence is proprietary.
Positive control	HeLa, A549, fetal heart, and BxPC-3 lysates; Human kidney tissue.
General notes	

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.

Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.

Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.

We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.

In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.

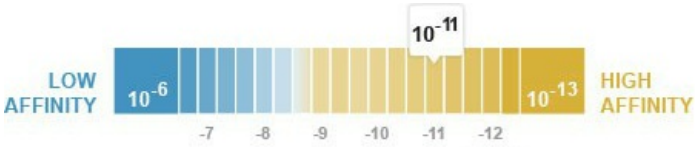
We are also updating the applications & species that this product has been "predicted to work with," however this information is not covered by our Abpromise guarantee.

Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.

Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, as well as customer reviews and Q&As.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
Dissociation constant (K_D)	$K_D = 5.00 \times 10^{-11}$ 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	EPR7913
Isotype	IgG

Applications

Our Abpromise guarantee covers the use of **ab131280** 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		1/1000 - 1/10000. Predicted molecular weight: 53 kDa.
IHC-P		1/100 - 1/250. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

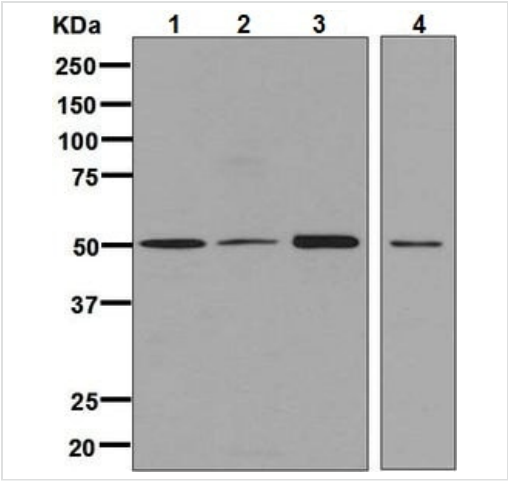
Application notes Is unsuitable for Flow Cyt or IP.

Target

Function May be a glycosyltransferase which participates in glycosylation of alpha-dystroglycan/DAG1. May interact with and reinforce a large complex encompassing the outside and inside of muscle membranes. Could be involved in brain development.

Tissue specificity	Widely expressed with highest expression in brain, heart, pancreas and skeletal muscle. Expressed at similar levels in control fetal and adult brain, but is much reduced in Fukuyama-type congenital dystrophy (FCMD) brains. Expressed in migrating neurons, including Cajar-Retzius cells and adult cortical neurons, as well as hippocampal pyramidal cells and cerebellar Purkinje cells. No expression observed in the glia limitans, the subpial astrocytes (which contribute to basement membrane formation) or other glial cells. In the FCMD brain, neurons in regions with no dysplasia show fair expression, whereas transcripts are nearly undetectable in the overmigrated dysplastic region.
Involvement in disease	Defects in FKTN are the cause of muscular dystrophy-dystroglycanopathy congenital with brain and eye anomalies type A4 (MDDGA4) [MIM:253800]; also called congenital muscular dystrophy Fukuyama type (FCMD) or Walker-Warburg syndrome FKTN-related. MDDGA4 is an autosomal recessive disorder characterized by congenital muscular dystrophy associated with cobblestone lissencephaly and other brain anomalies. Patients suffer from generalized skeletal muscle weakness and hypotonia from early infancy, mental retardation and seizures. Occasional features include optic atrophy, retinal detachment, cardiomyopathy. Defects in FKTN are the cause of muscular dystrophy-dystroglycanopathy congenital without mental retardation type B4 (MDDGB4) [MIM:613152]. An autosomal recessive disorder characterized by congenital muscular dystrophy and evidence of dystroglycanopathy. Features included increased serum creatine kinase, generalized weakness, mild white matter changes on brain MRI in some cases, and absence of mental retardation. Defects in FKTN are the cause of muscular dystrophy-dystroglycanopathy limb-girdle type C4 (MDDGC4) [MIM:611588]. MDDGC4 is an autosomal recessive degenerative myopathy characterized by progressive weakness of the pelvic and shoulder girdle muscles and elevated serum creatine kinase. The severity of the disease depends on age at onset which may vary from early to late childhood or even adulthood. MDDGC4 is a novel form of LGMD2 and has no brain involvement and a remarkable clinical response to corticosteroids. Defects in FKTN are the cause of cardiomyopathy dilated type 1X (CMD1X) [MIM:611615]; also called dilated cardiomyopathy with mild or no proximal muscle weakness. Dilated cardiomyopathy is a disorder characterized by ventricular dilation and impaired systolic function, resulting in congestive heart failure and arrhythmia. Patients are at risk of premature death.
Sequence similarities	Belongs to the licD transferase family.
Cellular localization	Golgi apparatus membrane.

Images



Western blot - Anti-Fukutin antibody [EPR7913] (ab131280)

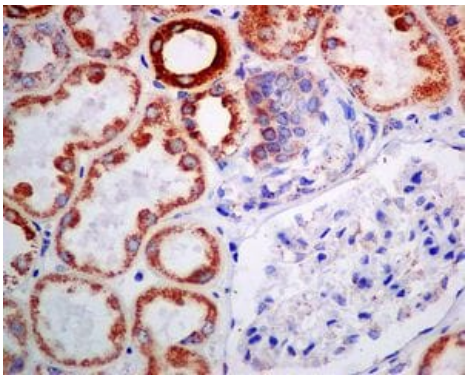
All lanes : Anti-Fukutin antibody [EPR7913] (ab131280) at 1/1000 dilution

Lane 1 : HeLa lysate
Lane 2 : A549 lysate
Lane 3 : Fetal heart lysate
Lane 4 : BxPC-3 lysate

Lysates/proteins at 10 µg per lane.

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

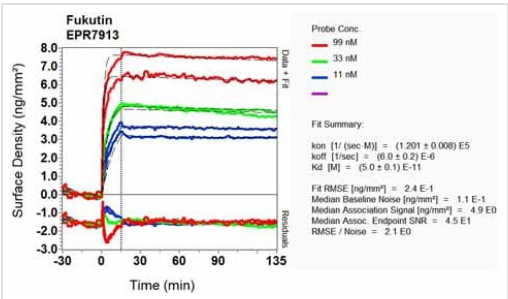
Predicted band size: 53 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Fukutin antibody [EPR7913] (ab131280)

Immunohistochemical analysis of paraffin-embedded Human kidney tissue labelling Fukutin with ab131280 at 1/100 dilution.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Other - Anti-Fukutin antibody [EPR7913] (ab131280)

Equilibrium disassociation constant (K_D)

Learn more about K_D

Click here to learn more about K_D

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit https://www.abcam.com/abpromise or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors