abcam

Product datasheet

Anti-alpha 1 Spectrin antibody [17C7] ab11751

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Overview

Product name	Anti-alpha 1 Spectrin antibody [17C7]
Description	Mouse monoclonal [17C7] to alpha 1 Spectrin
Host species	Mouse
Specificity	ab11751 is developed against the alpha I spectrin SH3 domain. It does not crossreact with alpha II (nonerythroid) spectrin SH3 domain or recombinant human fodrin SH3 domain. In NIH 3T3 cells, ab11751 reacts with a 200 kDa protein which is a candidate marker of endocytic vesicles called macropinosomes.
Tested applications	**Suitable for:** ELISA, IHC-Fr, ICC/IF, WB
Species reactivity	**Reacts with:** Mouse, Rat, Human
Immunogen	Recombinant alpha I spectrin (erythroid spectrin) SH3 domain.
Positive control	Erythroid spectrin in red blood cells and cerebellum.
General notes	The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. 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, along with publications, customer reviews and Q&As

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	Constituent: PBS
Purity	Affinity purified
Purification notes	Purified from tissue culture supernatant.
Clonality	Monoclonal
Clone number	17C7
Isotype	IgG1
Light chain type	kappa

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab11751 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
ELISA		Use at an assay dependent concentration.
IHC-Fr		Use at an assay dependent concentration.
ICC/IF	★★★★★ (2)	Use at an assay dependent concentration. See Abreview.
WB	★★★☆☆ (1)	Use at an assay dependent concentration. Predicted molecular weight: 280 kDa.

Target

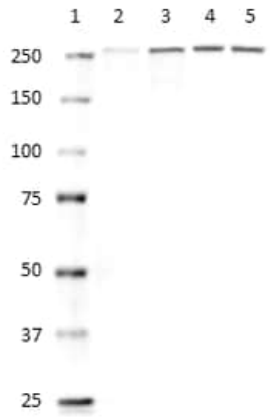
Function Spectrin is the major constituent of the cytoskeletal network underlying the erythrocyte plasma membrane. It associates with band 4.1 and actin to form the cytoskeletal superstructure of the erythrocyte plasma membrane.

Involvement in disease Defects in SPTA1 are the cause of elliptocytosis type 2 (EL2) [MIM:130600]. EL2 is a Rhesus-unlinked form of hereditary elliptocytosis, a genetically heterogeneous, autosomal dominant hematologic disorder. It is characterized by variable hemolytic anemia and elliptical or oval red cell shape.
Defects in SPTA1 are a cause of hereditary pyropoikilocytosis (HPP) [MIM:266140]. HPP is an autosomal recessive disorder characterized by hemolytic anemia, microspherocytosis, poikilocytosis, and an unusual thermal sensitivity of red cells.
Defects in SPTA1 are the cause of spherocytosis type 3 (SPH3) [MIM:270970]; also known as hereditary spherocytosis type 3 (HS3). Spherocytosis is a hematologic disorder leading to chronic hemolytic anemia and characterized by numerous abnormally shaped erythrocytes which are generally spheroidal. SPH3 is characterized by severe hemolytic anemia. Inheritance is autosomal recessive.

Sequence similarities Belongs to the spectrin family.
Contains 3 EF-hand domains.
Contains 1 SH3 domain.
Contains 21 spectrin repeats.

Cellular localization Cytoplasm > cytoskeleton. Cytoplasm > cell cortex.

Images



Western blot - Anti-alpha 1 Spectrin antibody [17C7] (ab11751)

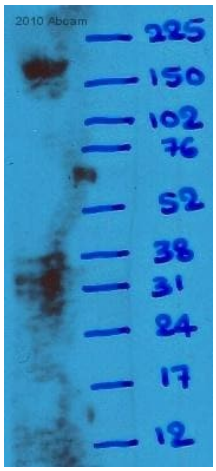
All lanes : Anti-alpha 1 Spectrin antibody [17C7] (ab11751) at 1 µg/ml

Lane 1 : MW marker
Lane 2 : Human Lung lysate
Lane 3 : Mouse Lung lysate
Lane 4 : Rat Brain lysate
Lane 5 : Human Kidney lysate

Lysates/proteins at 50 µg per lane.

Secondary
All lanes : HRP labeled goat anti-mouse IgG

Predicted band size: 280 kDa



Western blot - Anti-alpha 1 Spectrin antibody [17C7] (ab11751)

This image is courtesy of an Abreview submitted by Dr. Mahesh Shivananjappa

Anti-alpha 1 Spectrin antibody [17C7] (ab11751) at 1/1000 dilution + Human Platelet whole cell lysate at 25 µg

Secondary
HRP-conjugated Goat Anti-mouse IgG at 1/10000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 280 kDa
Additional bands at: 200 kDa (possible cleavage fragment)

Exposure time: 1 hour

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