abcam

Product datasheet

Anti-alpha Adaptin antibody [AC1-M11] ab2807

★★★★★ 2 Abreviews 11 References 5 Images

Overview

Product name	Anti-alpha Adaptin antibody [AC1-M11]
Description	Mouse monoclonal [AC1-M11] to alpha Adaptin
Host species	Mouse
Tested applications	**Suitable for:** WB, ICC/IF, IHC-P, Flow Cyt
Species reactivity	**Reacts with:** Mouse, Rat, Human
Immunogen	Full length native protein (purified) corresponding to Cow alpha Adaptin. Purified Bovine brain adaptor complexes
Positive control	pig brain lysate and transfected COS cells.
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. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	Preservative: 0.05% Sodium azide Constituent: PBS
Purity	Protein A purified
Clonality	Monoclonal
Clone number	AC1-M11
Isotype	IgG2a

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab2807 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)**	Use a concentration of 2 µg/ml. Predicted molecular weight: 108 kDa.
ICC/IF		1/100.
IHC-P		1/20.
Flow Cyt		1/100. **ab170191** - Mouse monoclonal IgG2a, is suitable for use as an isotype control with this antibody.

Target

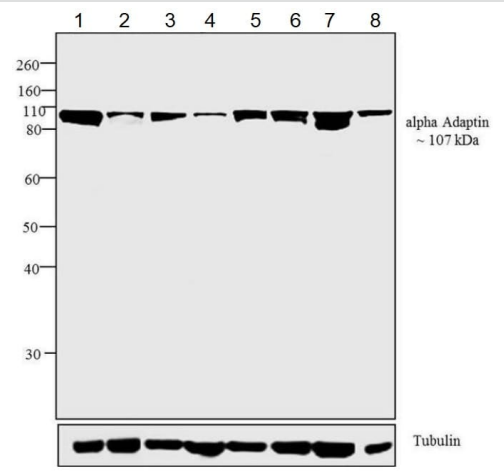
Relevance

Clathrin mediated endocytosis is the pathway by which many receptors for nutrients and hormones are internalized to be recycled or down regulated. During formation of clathrin coated membranes, clathrin co assembles with heterotetrameric molecules known as assembly polypeptides (APs) or adaptors which form a layer of protein coat between the clathrin lattice and the membrane. There are two characterized adaptors AP1 and AP2. AP1 is associated with clathrin coated vesicles at the trans Golgi network and AP2 is associated with the endocytic clathrin coated vesicles at the plasma membrane and has been shown to specifically interact with Shc and EGF receptor. AP2 is composed of four subunits, two separate 100 kDa gene products with similar domain structures (alpha and beta adaptin) and a 50 and 17 kDa subunit. There are two alpha adaptin genes, alpha A and alpha C which have a tissue specific pattern of expression.

Cellular localization

Cytoplasmic

Images



Western blot - Anti-alpha Adaptin antibody [AC1-M11] (ab2807)

All lanes : Anti-alpha Adaptin antibody [AC1-M11] (ab2807) at 2 µg/ml

Lane 1 : Rat brain tissue lysate

Lane 2 : SH-SY5Y (Human neuroblastoma cell line from bone marrow) whole cell lysate

Lane 3 : U-87 MG (Human glioblastoma-astrocytoma epithelial cell line) whole cell lysate

Lane 4 : COLO 205 (Human colon adenocarcinoma cell line) whole cell lysate

Lane 5 : PC-3 (Human prostate adenocarcinoma cell line) whole cell lysate

Lane 6 : MCF7 (Human breast adenocarcinoma cell line) whole cell lysate

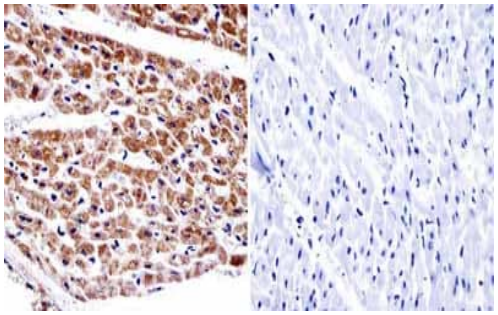
Lane 7 : NIH/3T3 (Mouse embryonic fibroblast cell line) whole cell lysate
Lane 8 : A-431 (Human epidermoid carcinoma cell line) whole cell lysate

Lysates/proteins at 30 µg per lane.

Secondary
All lanes : Goat anti-Mouse IgG (H+L) Superclonal™ Secondary Antibody, HRP conjugate at 1/2500 dilution

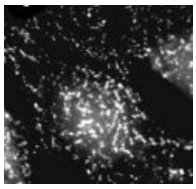
Predicted band size: 108 kDa

Known quantity of protein samples were electrophoresed using Novex® NuPAGE® 10 % Bis-Tris gel, XCell SureLock™ Electrophoresis System and Novex® Sharp Pre-Stained Protein Standard. Resolved proteins were then transferred onto a nitrocellulose membrane with Pierce™ Power Blotter System (22834). The membrane was probed with the relevant primary and secondary Antibody using iBind™ Flex Western Starter Kit. Chemiluminescent detection was performed using Pierce™ ECL Western Blotting Substrate.



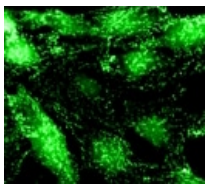
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-alpha Adaptin antibody [AC1-M11] (ab2807)

Immunohistochemistry was performed on normal biopsies of deparaffinized Human heart tissue. To expose target proteins heat induced antigen retrieval was performed using 10mM sodium citrate (pH6.0) buffer and microwaved for 8-15 minutes. Following antigen retrieval tissues were blocked in 3% BSA-PBS for 30 minutes at room temperature. Tissues were then probed at a dilution of 1:20 with a Mouse monoclonal antibody recognizing alpha Adaptin (ab2807) or without primary antibody (negative control) overnight at 4°C in a humidified chamber. Tissues were washed extensively with PBST and endogenous peroxidase activity was quenched with a peroxidase suppressor. Detection was performed using a biotin-conjugated secondary antibody and SA-HRP followed by colorimetric detection using DAB. Tissues were counterstained with hematoxylin and prepped for mounting.



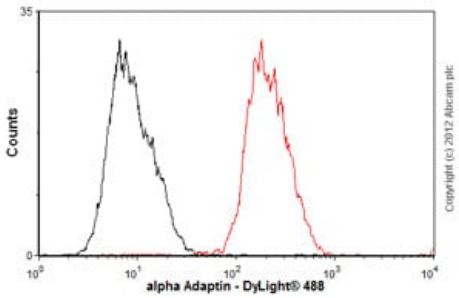
Immunocytochemistry/ Immunofluorescence - Anti-alpha Adaptin antibody [AC1-M11] (ab2807)

Immunolocalization of alpha-adaptin in NRK cells using ab2807.



Immunocytochemistry/ Immunofluorescence - Anti-alpha Adaptin antibody [AC1-M11] (ab2807)

Immunolocalization of alpha-adaptin in NRK cells using ab2807 (low power image of image 2).



Flow Cytometry - Anti-alpha Adaptin antibody [AC1-M11] (ab2807)

Overlay histogram showing HepG2 cells stained with ab2807 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab2807, 1/100 dilution) for 30 min at 22ºC. The secondary antibody used was DyLight® 488 goat anti-mouse IgG (H+L) (**ab96879**) at 1/500 dilution for 30 min at 22ºC. Isotype control antibody (black line) was mouse IgG2a [ICIGG2A] (**ab91361**, 2µg/1x10^6 cells) used under the same conditions. Acquisition of >5,000 events was performed. This antibody gave a positive signal in HepG2 cells fixed with 4% paraformaldehyde (10 min)/permeabilized with 0.1% PBS-Tween for 20 min used under the same conditions.

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.

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