

Product datasheet

Anti-Dynamin 3 antibody ab3458

★★★★☆ 2 Abreviews 8 References 3 Images

Overview

Product name	Anti-Dynamin 3 antibody
Description	Rabbit polyclonal to Dynamin 3
Host species	Rabbit
Tested applications	Suitable for: WB, IHC-P, ICC/IF
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide corresponding to Rat Dynamin 3 aa 623-639. Sequence: PDKSFTENDENGQAENF (Peptide available as ab4986)
	 Run BLAST with  Run BLAST with

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 Constituents: 0.1% BSA, 99% PBS
Purity	Immunogen affinity purified
Primary antibody notes	The dynamins are a family of 100 kDa GTPases transcribed from at least three separate genes. At least four mRNA splice variants for each dynamin have been described. Dynamins contain several conserved regions including the conserved, amino-terminal GTPase domain, a centrally located membrane-binding plekstrin homology domain (PHD), and a coiled-coil region located in front of a proline-rich domain (PRD). The PRD is thought to mediate interactions between dynamin and numerous other cellular proteins. Dynamin 1 is expressed exclusively in neurons, Dynamin 2 is ubiquitously expressed, and Dynamin 3 is thought to be restricted to expression in the brain, testis, heart, and lung. The dynamins participate in the cellular process of clathrin-mediated and fluid-phase endocytosis.
Clonality	Polyclonal
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab3458** 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. Can be blocked with Dynamamin 3 peptide (ab4986) . By Western blot, this antibody detects an ~100 kDa protein representing Dynamamin 3 from HeLa cell lysate.
IHC-P		Use a concentration of 4 µg/ml.
ICC/IF	★☆☆☆☆	Use a concentration of 1 µg/ml.

Target

Function

Microtubule-associated force-producing protein involved in producing microtubule bundles and able to bind and hydrolyze GTP. Most probably involved in vesicular trafficking processes, in particular endocytosis.

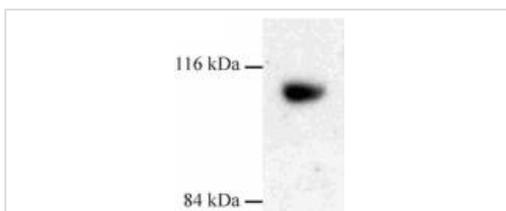
Sequence similarities

Belongs to the TRAFAC class dynamin-like GTPase superfamily. Dynamamin/Fzo/YdjA family. Contains 1 dynamin-type G (guanine nucleotide-binding) domain. Contains 1 GED domain. Contains 1 PH domain.

Cellular localization

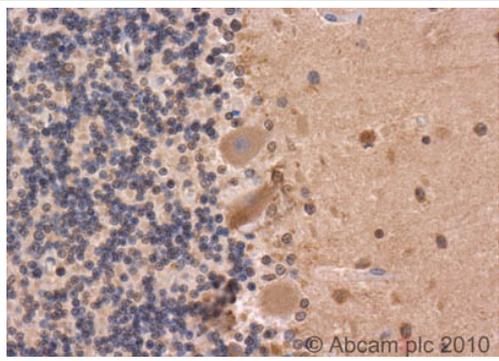
Cytoplasm. Cytoplasm, cytoskeleton. Microtubule-associated.

Images



Western blot of Dynamamin 3 on rat liver extract using ab3458.

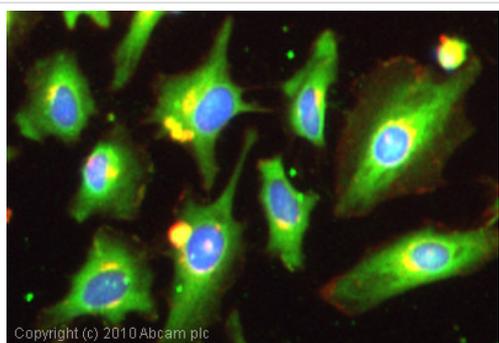
Western blot - Anti-Dynamamin 3 antibody (ab3458)



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Dynamin 3 antibody (ab3458)

ab3458 (4µg/ml) staining Dynamin 3 in human brain cerebellum using an automated system (DAKO Autostainer Plus). Using this protocol there is strong staining of nuclear/cytoplasmic compartments within the white matter region

Sections were rehydrated and antigen retrieved with the Dako 3 in 1 AR buffer citrate pH 6.1 in a DAKO PT link. Slides were peroxidase blocked in 3% H₂O₂ in methanol for 10 mins. They were then blocked with Dako Protein block for 10 minutes (containing casein 0.25% in PBS) then incubated with primary antibody for 20 min and detected with Dako envision flex amplification kit for 30 minutes. Colorimetric detection was completed with Diaminobenzidine for 5 minutes. Slides were counterstained with Haematoxylin and coverslipped under DePeX. Please note that, for manual staining, optimization of primary antibody concentration and incubation time is recommended. Signal amplification may be required.



Immunocytochemistry/ Immunofluorescence - Anti-Dynamin 3 antibody (ab3458)

ICC/IF image of ab3458 stained HeLa cells. The cells were 100% methanol fixed (5 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab3458, 1µg/ml) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.

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