

Product datasheet

Anti-AFG3L2 antibody ab68023

★★★★☆ [1 Abreviews](#) [6 References](#) [2 Images](#)

Overview

Product name	Anti-AFG3L2 antibody
Description	Mouse polyclonal to AFG3L2
Host species	Mouse
Tested applications	Suitable for: ICC/IF, WB
Species reactivity	Reacts with: Human
Immunogen	Recombinant full length protein within Human AFG3L2. The exact immunogen sequence used to generate this antibody is proprietary information. If additional detail on the immunogen is needed to determine the suitability of the antibody for your needs, please contact our Scientific Support team to discuss your requirements.
Positive control	AFG3L2 transfected 293T cell lysate
General notes	<p>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.</p> <p>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</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
Storage buffer	pH: 7.40 Constituent: PBS
Purity	Protein A purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab68023 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
ICC/IF		Use a concentration of 5 µg/ml.
WB	★★★★ (1)	1/500 - 1/1000. Detects a band of approximately 80 kDa (predicted molecular weight: 89 kDa).

Target

Function

ATP-dependent protease which is essential for axonal development.

Tissue specificity

Ubiquitous. Highly expressed in the cerebellar Purkinje cells.

Involvement in disease

Defects in AFG3L2 are the cause of spinocerebellar ataxia type 28 (SCA28) [MIM:610246]. It is a clinically and genetically heterogeneous group of cerebellar disorders. Patients show progressive incoordination of gait and often poor coordination of hands, speech and eye movements, due to degeneration of the cerebellum with variable involvement of the brainstem and spinal cord. SCA28 is an autosomal dominant cerebellar ataxia (ADCA) with a slow progressive course and no evidence of sensory involvement or cognitive impairment.

Defects in AFG3L2 are the cause of spastic ataxia autosomal recessive type 5 (SPAX5) [MIM:614487]. A neurodegenerative disorder characterized by early onset spasticity, peripheral neuropathy, ptosis, oculomotor apraxia, dystonia, cerebellar atrophy, and progressive myoclonic epilepsy.

Sequence similarities

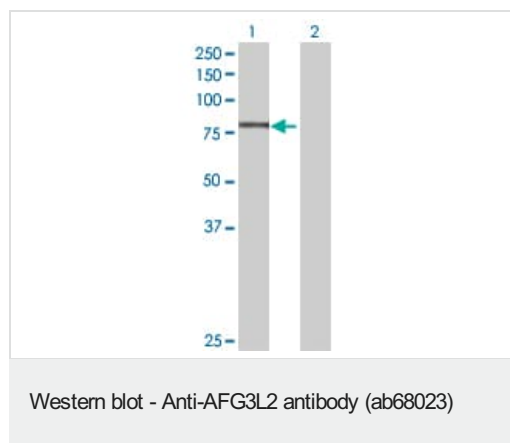
In the N-terminal section; belongs to the AAA ATPase family.

In the C-terminal section; belongs to the peptidase M41 family.

Cellular localization

Mitochondrion membrane.

Images



All lanes : Anti-AFG3L2 antibody (ab68023) at 1/500 dilution

Lane 1 : AFG3L2 transfected 293T cell lysate

Lane 2 : Non transfected 293T cell lysate

Lysates/proteins at 25 µg per lane.

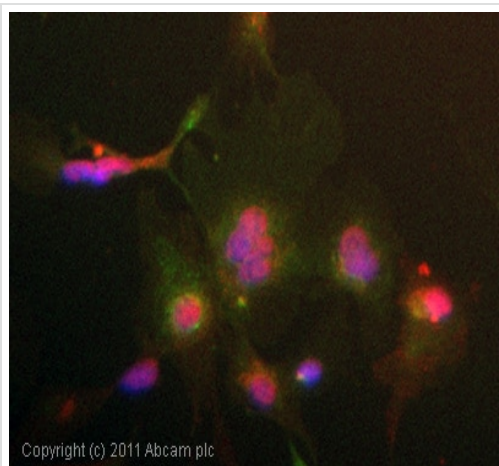
Secondary

All lanes : Goat Anti-Mouse IgG (H&L)-HRP Conjugate secondary antibody at 1/2500 dilution

Developed using the ECL technique.

Predicted band size: 89 kDa

Observed band size: 80 kDa



Immunocytochemistry/ Immunofluorescence - Anti-
AFG3L2 antibody (ab68023)

ICC/IF image of ab68023 stained HepG2 cells. The cells were 4% formaldehyde fixed (10 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 (ab68023, 5µg/ml) overnight at +4°C. The secondary antibody (green) was **ab96879**, DyLight® 488 goat anti-mouse IgG (H+L) used at a 1/250 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.

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