abcam

Product datasheet

Anti-Ataxin 1 antibody [EPR19613] - BSA and Azide free ab225895



5 Images

Overview

Product name Anti-Ataxin 1 antibody [EPR19613] - BSA and Azide free

Description Rabbit monoclonal [EPR19613] to Ataxin 1 - BSA and Azide free

Host species Rabbit

Tested applications Suitable for: IP, WB Species reactivity Reacts with: Human

Immunogen Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.

Positive control WB: SH-SY5Y, HeLa, U-87 MG, 293T and Neuro-2a whole cell lysates, human cerebellum and

> fetal brain lysates, 293T transfected with full length human ATXN1 expression vector containing a myc-His-tag® whole cell lysate, HeLa nuclear and membrane fraction lysate. IP: Human brain

lysate.

General notes ab225895 is the carrier-free version of ab201037.

> Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cellbased assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar[®] Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.

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

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monoclonal antibodies. For details on our patents, please refer to RabMAb@patents.

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C. Do Not Freeze.

Storage buffer pH: 7.2

Constituent: PBS

Carrier free Yes

Purity Protein A purified

ClonalityMonoclonalClone numberEPR19613

Isotype IgG

Applications

The Abpromise guarantee Our Abpromise guarantee covers the use of ab225895 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
IP		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration.

Target

Function Binds RNA in vitro. May be involved in RNA metabolism. The expansion of the polyglutamine tract

may alter this function.

Tissue specificity Widely expressed throughout the body.

Involvement in disease Defects in ATXN1 are the cause of spinocerebellar ataxia type 1 (SCA1) [MIM:164400]; also

known as olivopontocerebellar atrophy I (OPCA I or OPCA1). Spinocerebellar ataxia 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

cerebellum degeneration with variable involvement of the brainstem and spinal cord. SCA1 belongs to the autosomal dominant cerebellar ataxias type I (ADCA I) which are characterized by

cerebellar ataxia in combination with additional clinical features like optic atrophy,

ophthalmoplegia, bulbar and extrapyramidal signs, peripheral neuropathy and dementia. SCA1 is caused by expansion of a CAG repeat in the coding region of ATXN1. Longer expansions result

in earlier onset and more severe clinical manifestations of the disease.

Sequence similaritiesBelongs to the ATXN1 family.

Contains 1 AXH domain.

Domain The AXH domain is required for interaction with CIC.

Post-translational Phosphorylation at Ser-775 increases the pathogenicity of proteins with an expanded

modifications

polyglutamine tract.

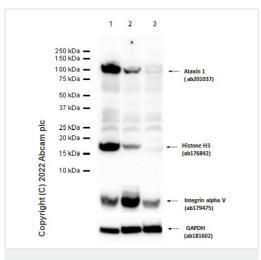
Sumoylation is dependent on nuclear localization and phosphorylation at Ser-775. It is reduced in

the presence of an expanded polyglutamine tract.

Cellular localization

Cytoplasm. Nucleus. Colocalizes with USP7 in the nucleus.

Images



Western blot - Anti-Ataxin 1 antibody [EPR19613] - BSA and Azide free (ab225895)

All lanes : Anti-Ataxin 1 antibody [EPR19613] (ab201037) at 1/1000 dilution

Lane 1 : HeLa (Human cervix adenocarcinoma epithelial cell) nuclear fraction lysate

Lane 2 : HeLa (Human cervix adenocarcinoma epithelial cell) membrane fraction lysate

Lane 3 : HeLa (Human cervix adenocarcinoma epithelial cell) cytoplasm fraction lysate

Lysates/proteins at 20 µg per lane.

Secondary

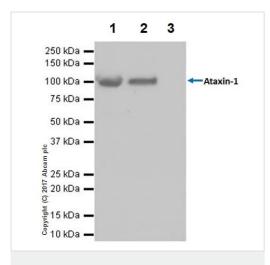
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (<u>ab97051</u>) at 1/20000 dilution

Exposure time: 60 seconds

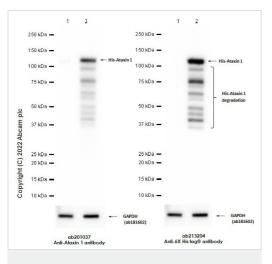
Blocking buffer and concentration: 5% NFDM/TBST **Diluting buffer and concentration**: 5% NFDM/TBST

Ataxin1 is mainly expressed in nuclear (PMID: 23760502, PMID: 9778246, PMID: 21384195 PMID: 32620905).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab201037</u>).



Immunoprecipitation - Anti-Ataxin 1 antibody
[EPR19613] - BSA and Azide free (ab225895)



Western blot - Anti-Ataxin 1 antibody [EPR19613] - BSA and Azide free (ab225895)

Ataxin 1 was immunoprecipitated from 0.35 mg of human brain lysate with <u>ab201037</u> at 1/30 dilution. Western blot was performed from the immunoprecipitate using <u>ab201037</u> at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (<u>ab131366</u>), was used for detection at 1/1000 dilution.

Lane 1: Human brain lysate 10 µg (Input).

Lane 2: ab201037 IP in human brain lysate.

Lane 3: Rabbit monoclonal $\lg G \left(\underline{ab172730} \right)$ instead of $\underline{ab201037}$ in human brain lysate.

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 1 second.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab201037).

All lanes : Anti-Ataxin 1 antibody [EPR19613] (ab201037) at 1/10000 dilution

Lane 1: 293T (Human embryonic kidney epithelial cell) transfected with an empty vector whole cell lysate

Lane 2: 293T transfected with full length human ATXN1 expression vector containing a myc-His-tag® whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

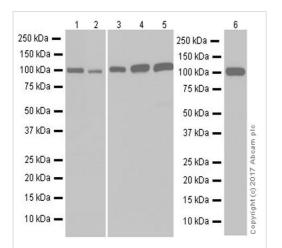
All lanes : Goat Anti-Rabbit lgG H&L (HRP) (ab97051) at 1/20000 dilution

Exposure time: 1 second

Blocking buffer and concentration: 5% NFDM/TBST

Diluting buffer and concentration: 5% NFDM/TBST

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab201037).



Western blot - Anti-Ataxin 1 antibody [EPR19613] - BSA and Azide free (ab225895)

All lanes : Anti-Ataxin 1 antibody [EPR19613] (ab201037) at 1/1000 dilution

Lane 1: SH-SY5Y (human neuroblastoma cell line from bone marrow), whole cell lysate

Lane 2: HeLa (human epithelial cell line from cervix adenocarcinoma), whole cell lysate

Lane 3 : Neuro-2a (mouse neuroblastoma cell line), whole cell lysate

Lane 4: Human cerebellum tissue lysate

Lane 5: Human fetal brain tissue lysate

Lane 6: U-87 MG (human glioblastoma-astrocytoma epithelial cell line), whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit lgG H&L (HRP) (<u>ab97051</u>) at 1/100000 dilution

Developed using the ECL technique.

Observed band size: 105 kDa

Blocking/Dilution buffer: 5% NFDM/TBST.

Exposure time: Lane 1,2,6: 3 minutes; Lane 3-5: 15 seconds.

The molecular weight observed is consistent with what has been described in the literature (PMID: 7647801).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab201037).



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