Datasheet for ABIN968504

anti-Ataxin 2 antibody (AA 713-904)

3 Images | 3 Publications

Go to Product page

Overview

Quantity:	50 µg
Target:	Ataxin 2 (ATXN2)
Binding Specificity:	AA 713-904
Reactivity:	Human, Rat
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This Ataxin 2 antibody is un-conjugated
Application:	Western Blotting (WB), Immunofluorescence (IF)

Product Details

Immunogen:	Human Ataxin-2 aa. 713-904
Clone:	22-Ataxin
Isotype:	IgG1
Cross-Reactivity:	Rat (Rattus)
Characteristics:	1. Since applications vary, each investigator should titrate the reagent to obtain optimal results. 2. Please refer to us for technical protocols. 3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing. 4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
Purification:	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity

Product Details

	chromatography.

Target Details

Target:	Ataxin 2 (ATXN2)
Alternative Name:	Ataxin-2 (ATXN2 Products)
Background:	The hereditary ataxias are neurodegenerative disorders characterized by abnormalities of balance due to dysfunction of the cerebellum and cerebellar pathways. Spinocerebellar ataxias (SCAs) represent a heterogeneous group of disorders with a prevalence of about 1 in 10^5. Moderate expansion (36 or 37 units) of CAG repeats on the SCA2 gene leads to a gene product, ataxin-2, that has a long polyglutamine tract. Ataxin-2 is a basic protein with two domains (Sm1 and Sm2) that have been implicated in RNA splicing and protein interaction. Human ataxin-2 has significant homology with mouse ataxin-2 and ataxin-2 related protein. Ataxin-2 is expressed as early as day 8 of mouse embryogenesis and is detected in brain, heart, placenta, liver, skeletal muscle, and pancreas, but not in lung or kidney. Expression increases with age and the protein is localized to the cytoplasm in purkinje cells and other neuronal cell types. Thus, ataxin-2 is thought to be important for RNA splicing or protein complex formation in many normal tissues, while polyglutamine containing ataxin-2 leads to neuropathology.
Molecular Weight:	150 kDa
Pathways:	Ribonucleoprotein Complex Subunit Organization

Application Details

Application Notes:	Methanol Procedure for a 96 well plate: Remove media from wells. Add 100 µl/well fresh 3.7% Formaldehyde in PBS. Incubate for 10 minutes at room temperature (RT). Flick out and add 100 µl/well 90% methanol. Incubate for 5 minutes at RT. Flick out and wash twice with PBS. Flick out PBS and add 100 µl/well blocking buffer (3% FBS in PBS). Incubate for 30 minutes at RT. Flick out and add diluted antibody (diluted in blocking buffer). Incubate for 1 hour at RT. Wash three times with PBS. Flick out PBS and add second step reagent. Incubate for 1 hour at RT. Wash three times with PBS. Triton-X 100 Procedure for a 96 well plate: Remove media from wells. Add 100 µl/well fresh 3.7% Formaldehyde in PBS. Incubate for 10 minutes at room temperature (RT). Flick out and add 100 µl/well 0.1% Triton-X 100. Incubate for 5 minutes at RT. Flick out and wash twice with PBS. Flick out PBS and add 100 µl/well blocking buffer (3% FBS in PBS). Incubate for 30 minutes at RT. Flick out and add diluted antibody (diluted in blocking buffer). Incubate for 1

Application Details

	hour at RT. Flick out and wash three times with PBS. Flick out and add second step reagent. Incubate for 1 hour at RT. Flick out and wash three times with PBS.
Comment:	Related Products: ABIN968537, ABIN967389
Restrictions:	For Research Use only

Handling

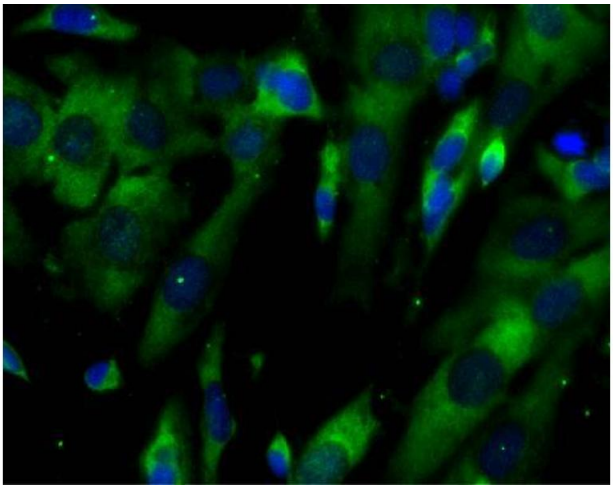
Format:	Liquid
Concentration:	250 µg/mL
Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09 % sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	Store undiluted at -20° C.

Publications

Product cited in:	Huynh, Del Bigio, Ho, Pulst: "Expression of ataxin-2 in brains from normal individuals and patients with Alzheimer's disease and spinocerebellar ataxia 2." in: **Annals of neurology**, Vol. 45, Issue 2, pp. 232-41, (1999) (PubMed). Nechiporuk, Huynh, Figueroa, Sahba, Nechiporuk, Pulst: "The mouse SCA2 gene: cDNA sequence, alternative splicing and protein expression." in: **Human molecular genetics**, Vol. 7, Issue 8, pp. 1301-9, (1998) (PubMed). Pulst, Nechiporuk, Nechiporuk, Gispert, Chen, Lopes-Cendes, Pearlman, Starkman, Orozco-Diaz, Lunkes, DeJong, Rouleau, Auburger, Korenberg, Figueroa, Sahba: "Moderate expansion of a normally biallelic trinucleotide repeat in spinocerebellar ataxia type 2." in: **Nature genetics**, Vol. 14, Issue 3, pp. 269-76, (1996) (PubMed).

Western Blotting

Image 1. Western blot analysis of Ataxin-2 on Jurkat cell lysate (left). Lane 1: 1:250, lane 2: 1:500, lane 3: 1:1000 dilution of anti-Ataxin-2.



Immunofluorescence

Image 2. Immunofluorescent staining of SH-SY5Y cells (right). Cells were seeded in a collagen coated 384 well imaging plate at ~ 8,000 cells per well. After overnight incubation, cells were stained using the Triton X100 fix/perm protocol and the anti-Ataxin antibody. The second step reagent was Alexa Fluor® 488 goat anti mouse Ig (Invitrogen). The image was taken on a Pathway 855 or 435 imager using a 20x objective. This antibody also stained SK-N-SH, C6, U87 and U373 cells using both the Triton X100 and methanol fix/perm protocols.

Image 3.