## ATXN2 Polyclonal Antibody

Catalog No: #29930

Package Size: #29930-1 50ul #29930-2 100ul



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## Description

Product Name	ATXN2 Polyclonal Antibody
Host Species	Rabbit
Clonality	Polyclonal
Isotype	lgG
Purification	Affinity purification
Applications	WB,IHC,IF
Species Reactivity	Human,Mouse,Rat
Immunogen Description	A synthetic peptide of human ATXN2
Other Names	ATXN2; ATX2; SCA2; TNRC13; ataxin-2
Accession No.	Swiss-Prot#:Q99700NCBI Gene ID:6311
Uniprot	Q99700
GeneID	6311;
Calculated MW	170kDa
Formulation	Avoid freeze / thaw cycles. Buffer: PBS with 50% glycerol, pH7.4.
Storage	Store at -20°C

Application Details			
WB 1:500 - 1:2000			
IHC 1:50 - 1:200			
IF 1:50 - 1:200			

## Images



Immunofluorescence analysis of C6 cells using ATXN2 at dilution of 1:100. Blue: DAPI for nuclear staining.



Immunofluorescence analysis of L929 cells using ATXN2 at dilution of 1:100. Blue: DAPI for nuclear staining.



Immunofluorescence analysis of U-2 OS cells using ATXN2 at dilution of 1:100. Blue: DAPI for nuclear staining.



Immunohistochemistry of paraffin-embedded rat brain using ATXN2 at dilution of 1:100 (40x lens).



Immunohistochemistry of paraffin-embedded human colon carcinoma using ATXN2 at dilution of 1:100 (40x lens).



Western blot analysis of Ataxin 2 expression in HEK293T (A), PC3 (B), NIN3T3 (C) whole cell lysates. (Predicted band size: 140 kD; Observed band size: 170 kD)



Immunohistochemical analysis of Ataxin 2 staining in human breast cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

## Background

This gene belongs to a group of genes that is associated with microsatellite-expansion diseases, a class of neurological and neuromuscular disorders caused by expansion of short stretches of repetitive DNA. The protein encoded by this gene has two globular domains near the N-terminus, one of which contains a clathrin-mediated trans-Golgi signal and an endoplasmic reticulum exit signal. The encoded cytoplasmic protein localizes to the endoplasmic reticulum and plasma membrane, is involved in endocytosis, and modulates mTOR signals, modifying ribosomal translation and mitochondrial function. The N-terminal region of the protein contains a polyglutamine tract of 14-31 residues that can be expanded in the pathogenic state to 32-200 residues. Intermediate length expansions of this tract increase susceptibility to amyotrophic lateral sclerosis, while long expansions of this tract result in spinocerebellar ataxia-2, an autosomal-dominantly inherited, neurodegenerative disorder. Genome-wide association studies indicate that loss-of-function mutations in this gene may be associated with susceptibility to type I diabetes, obesity and hypertension. Alternative splicing results in multiple transcript variants.

Note: This product is for in vitro research use only