

Summary

Production Name	Ataxin-2 Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	WB,
Reactivity	Human,Rat,Mouse

Performance

Conjugation	Unconjugated
Modification	Unmodified
lsotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw
	cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

Gene Name	ATXN2		
Alternative Names	ATXN2; ATX2; SCA2; TNRC13; Ataxin-2; Spinocerebellar ataxia type 2 protein;		
	Trinucleotide repeat-containing gene 13 protein		
Gene ID	6311.0		
SwissProt ID	Q99700. The antiserum was produced against synthesized peptide derived from human		
	ATXN2. AA range:731-780		

Application

Dilution Ratio	WB 1:500 - 1:2000. ELISA: 1:20000.
Molecular Weight	140kD



Background

ataxin 2(ATXN2) Homo sapiens 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 clathrinmediated trans-Golgi signal and an endoplasmic reticulum exit signal. The protein is primarily localized to the Golgi apparatus, with deletion of the Golgi and endoplasmic reticulum signals resulting in abnormal subcellular localization. In addition, the N-terminal region 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, neurodegenerdisease: Defects in ATXN2 are the cause of spinocerebellar ataxia type 2 (SCA2) [MIM:183090]; also known as olivopontocerebellar atrophy II (OPCA II or OPCA2). 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. SCA2 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. SCA2 is characterized by hyporeflexia, myoclonus and action tremor and dopamineresponsive parkinsonism. SCA2 is caused by expansion of a CAG repeat in the coding region of ATXN2. Longer expansions result in earlier onset of the disease. In some patients with smaller CAG repeat expansions, SCA2 presents as pure familial parkinsonism without cerebellar signs, polymorphism: The poly-Gln region of ATXN2 is polymorphic: 17 to 29 repeats in the normal population, expanded to about 36 to 52 repeats in spinocerebellar ataxia 2 (SCA2) patients., similarity: Belongs to the ataxin-2 family., subunit: Monomer (By similarity). Can also form homodimers., tissue specificity: Expressed in the brain, heart, liver, skeletal muscle, pancreas and placenta. Isoform 1 is predominant in the brain and spinal cord while isoform 4 is more abundant in the cerebellum. In the brain, broadly expressed in the amygdala, caudate nucleus, corpus callosum, hippocampus, hypothalamus, substantia nigra, subthalamic nucleus and thalamus.,

Research Area

Image Data

Product Name: Ataxin-2 Rabbit Polyclonal Antibody Catalog #: APRab07252





Western blot analysis of lysates from HepG2, Jurkat, and 293 cells, using ATXN2 Antibody. The lane on the right is blocked



Western blot analysis of the lysates from HepG2 cells using ATXN2 antibody.



Western Blot analysis of various cells using Ataxin-2 Polyclonal Antibody diluted at 1: 1000





Western Blot analysis of 293 cells using Ataxin-2 Polyclonal Antibody diluted at 1: 1000

Note

For research use only.