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ATXN7 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP16926c

Product Information

Application	WB, E
Primary Accession	O15265
Other Accession	Q8R4I1, NP_000324.1, NP_001170858.1
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB36286
Calculated MW	95451
Antigen Region	354-381

Additional Information

Gene ID	6314
Other Names	Ataxin-7, Spinocerebellar ataxia type 7 protein, ATXN7, SCA7
Target/Specificity	This ATXN7 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 354-381 amino acids from the Central region of human ATXN7.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	ATXN7 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	ATXN7
Synonyms	SCA7 {ECO:0000303|PubMed:9288099}
Function	Acts as a component of the SAGA (aka STAGA) transcription coactivator-HAT

	complex (PubMed:15932940, PubMed:18206972). Mediates the interaction of SAGA complex with the CRX and is involved in CRX- dependent gene activation (PubMed:15932940, PubMed:18206972). Probably involved in tethering the deubiquitination module within the SAGA complex (PubMed:24493646). Necessary for microtubule cytoskeleton stabilization (PubMed:22100762). Involved in neurodegeneration (PubMed:9288099).
Cellular Location	[Isoform a]: Nucleus. Nucleus, nucleolus. Nucleus matrix. Cytoplasm, cytoskeleton. Note=In addition to a diffuse distribution throughout the nucleus, it is associated with the nuclear matrix and the nucleolus (PubMed:10441328). It is able to shuttle between the nucleus and cytoplasm (PubMed:16314424)
Tissue Location	[Isoform a]: Isoform a is expressed in CNS, but is expressed predominantly in the peripherical tissues

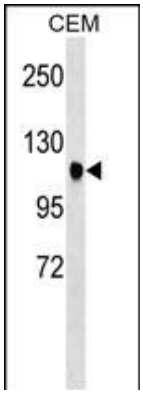
Background

The autosomal dominant cerebellar ataxias (ADCA) are a heterogeneous group of neurodegenerative disorders characterized by progressive degeneration of the cerebellum, brain stem and spinal cord. Clinically, ADCA has been divided into three groups: ADCA types I-III. ADCAI is genetically heterogeneous, with five genetic loci, designated spinocerebellar ataxia (SCA) 1, 2, 3, 4 and 6, being assigned to five different chromosomes. ADCAII, which always presents with retinal degeneration (SCA7), and ADCAIII often referred to as the 'pure' cerebellar syndrome (SCA5), are most likely homogeneous disorders. Several SCA genes have been cloned and shown to contain CAG repeats in their coding regions. ADCA is caused by the expansion of the CAG repeats, producing an elongated polyglutamine tract in the corresponding protein. The expanded repeats are variable in size and unstable, usually increasing in size when transmitted to successive generations. This locus has been mapped to chromosome 3, and it has been determined that the diseased allele associated with spinocerebellar ataxia-7 contains 38-130 CAG repeats (near the N-terminus), compared to 7-17 in the normal allele. The encoded protein is a component of the SPT3/TAF9/GCN5 acetyltransferase (STAGA) and TBP-free TAF-containing (TFTC) chromatin remodeling complexes, and it thus plays a role in transcriptional regulation. Alternative splicing results in multiple transcript variants.

References

Bonnet, J., et al. EMBO Rep. 11(8):612-618(2010)
Han, Y., et al. Neurol India 58(4):622-626(2010)
Chou, A.H., et al. Neurochem. Int. 56(2):329-339(2010)
Mookerjee, S., et al. J. Neurosci. 29(48):15134-15144(2009)
Freund, A.A., et al. Arq Neuropsiquiatr 67(4):1124-1132(2009)

Images



ATXN7 Antibody (Center) (Cat. #AP16926c) western blot analysis in CEM cell line lysates (35ug/lane).This demonstrates the ATXN7 antibody detected the ATXN7 protein (arrow).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.