

Product datasheet for RC226271L3V

OriGene Technologies, Inc.

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Ataxin 7 (ATXN7) (NM_001128149) Human Tagged ORF Clone Lentiviral Particle

Product data:

Product Type: Lentiviral Particles

Symbol: Ataxin 7

Synonyms: ADCAII; OPCA3; SCA7; SGF73

Mammalian Cell Puromycin

Selection:

Vector: pLenti-C-Myc-DDK-P2A-Puro (PS100092)

Tag: Myc-DDK

ACCN: NM_001128149

ORF Size: 2835 bp

ORF Nucleotide Sequence: The ORF insert of this clone is exactly the same as(RC226271).

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of

reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing

variants is recommended prior to use. More info

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

RefSeq: <u>NM_001128149.1, NP_001121621.1</u>

RefSeq ORF: 2244 bp

Locus ID: 6314

UniProt ID: O15265

Cytogenetics: 3p14.1

MW: 101.11 kDa





Gene Summary:

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 polyalutamine 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 37-306 CAG repeats (near the N-terminus), compared to 4-35 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. [provided by RefSeq, Jul 2016]