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Product datasheet for SC329227

Ataxin 7 (ATXN7) (NM_001177387) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ataxin 7 (ATXN7) (NM_001177387) Human Untagged Clone
Tag:	Tag Free
Symbol:	Ataxin 7
Synonyms:	ADCAII; OPCA3; SCA7; SGF73
Mammalian Cell Selection:	None
Vector:	pCMV6-XL5
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF:

>NCBI ORF sequence for NM_001177387, the custom clone sequence may differ by one or more nucleotides

ATGTCGGAGCGGGCCGCGGATGACGTCAGGGGGGAGCCGCGCCGCGCGGCGGCGGCGGCG
GGCGGAGCAGCGGCCGCGGCCGCCCGGCAGCAGCAGCAGCAGCAGCAGCAGCAGCCG
CCGCCTCCGCAGCCCCAGCGGCAGCAGCACCCGCCACCGCCGCCACGGCGCACACGGCCG
GAGGACGGCGGGCCCGGCGCCGCCTCCACCTCGGCCGCCGCAATGGCGACGGTCGGGGAG
CGCAGGCCTCTGCCCAGTCCTGAAGTGATGCTGGGACAGTCGTGGAATCTGTGGGTTGAG
GCTTCCAAACTTCCTGGGAAGGACGGGACAGAATTGGACGAAAGTTTCAAGGAGTTTGGG
AAAAACCGCGAAGTCATGGGGCTCTGTCGGGAAGACATGCCAATATTTGGTTTCTGTCCA
GCCCATGATGATTTCTACTTGGTGGTGTGTAACGACTGTAATCAGGTTGTCAAACCGCAG
GCATTTCAATCACATTATGAAAGAAGACATAGCTCATCCAGCAAGCCGCCTTTGGCCGTT
CCTCCCACTTCAGTATTTTCCTTCTTCCCTTCTCTGTCCAAAAGCAAAGGAGGCAGTGCA
AGTGGAAGCAACCGTTCTTCCAGTGGAGGTGTTCTTAGCGCATCCTCATCAAGTTCCAAG
TTGTTGAAATCACCCAAAGAGAAACTGCAGCTCAGGGGGAACACCAGGCCAATGCATCCC
ATTCAGCAAAGTAGAGTTCCCCATGGTAGAATCATGACACCCTCTGTGAAAGTGGAAAAG
ATTCATCCGAAAATGGATGGCACACTACTGAAATCTGCGGTGGGGCCAACCTGTCCTGCT
ACTGTGAGTTCCTTAGTCAAGCCTGGCCTTAACTGCCCCTCAATACCAAAGCCAACCTTG
CCTTCACCTGGACAGATTCTGAATGGCAAAGGGCTTCCTGCACCGCCCACTCTGGAAAAG
AAACCTGAAGACAATTCCAATAATAGGAAATTTTTAAATAAGAGATTATCAGAAAGAGAG
TTTGATCCTGACATCCACTGTGGGGTTATTGATCTCGACACCAAGAAGCCCTGCACCCGG
TCTTTGACATGCAAGACACATTCCTTAACCCAGCGCAGGGCTGTCCAGGGTAGAAGAAAA
CGATTTGATGTGTTATTAGCCGAGCACAAAAACAAAACCAGGGAAAAGGAATTGATTCGC
CATCCGGACTCTCAGCAACCACCGCAGCCTCTCAGGGACCCGCATCCCGCCCCTCCTAGA
ACGTCACAGGAGCCGCACCAAAACCCTCACGGAGTGATTCCTTCCGAATCAAAGCCTTTT
GTAGCTAGTAAACCTAAACCTCACACCCCCAGTCTTCCAAGGCCTCCAGGCTGCCCTGCT
CAGCAAGGTGGGAGTGCCCCCATTGACCCTCCTCCAGTCCATGAATCTCCACACCCTCCC
CTGCCTGCCACTGAGCCAGCTTCTCGGTTATCCAGTGAGGAGGGCGAAGGCGATGACAAA
GAAGAGTCTGTTGAAAAACTGGACTGTCATTATTCAGGTCATCATCCTCAGCCAGCATCT
TTTTGCACATTTGGGAGCCGGCAGATAGGAAGAGGCTATTACGTGTTTGACTCCAGGTGG
AATCGACTTCGCTGCGCCCTCAACCTCATGGTGGAGAAGCATCTGAATGCACAGCTATGG
AAGAAAATCCCACCAGTGCCCAGTACCACCTCACCCATCTCCACACGTATTCCTCACCGG
ACAAACTCTGTGCCGACATCACAATGTGGAGTCAGCTATCTGGCAGCAGCCACCGTCTCT
ACATCCCCAGTCCTGCTCTCATCTACCTGCATCTCCCCAAATAGCAAATCGGTACCAGCT
CATGGAACCACACTAAATGCACAGCCTGCTGCTTCAGGGGCGATGGATCCTGTGTGCAGT
ATGCAATCCAGACAAGTGTCCTCTTCATCCTCATCCCCTTCCACGCCCTCTGGCCTTTCC
TCGGTTCCTTCCTCCCCCATGTCCAGGAAACCTCAGAAATTGAAATCCAGCAAATCTTTG
AGGCCCAAGGAGTCTTCTGGTAACAGCACTAACTGTCAAAATGCCAGTAGCAGTACCAGT
GGCGGCTCAGGAAAGAAACGCAAAAACAGTTCCCCACTGTTGGTTCACTCTTCCTCCTCC
TCTTCCTCCTCCTCCTCTTCTTCTCATTCCATGGAGTCTTTTAGGAAAAACTGTGTGGCT
CACTCTGGGCCTCCCTACCCCTCAACGGTAACATCTTCCCATAGCATCGGCCTCAACTGT
GTGACGAATAAAGCAAATGCGGTGAACGTCCGGCATGACCAGTCAGGGAGGGGCCCCCCC
ACCGGGAGCCCTGCTGAATCCATCAAGAGGATGAGTGTGATGGTGAACAGCAGTGATTCT
ACTCTTTCTCTTGGGCCATTCATTCACCAGTCCAATGAACTGCCTGTCAACTCCCACGGC
AGTTTTTCCCACTCACACACTCCTCTAGACAAACTCATAGGAAAGAAAAGAAAGTGCTCA
CCCAGCTCGAGCAGCATCAACAACAGCAGCAGCAAACCCACAAAGGTTGCCAAAGTGCCA
GCCGTGAACAATGTCCACATGAAACACACAGGCACCATCCCAGGGGCACAAGGACTGATG
AACAGTTCCCTCCTTCATCAGGATATCTCCTCACCTTGCTTACGAACAGGAATTTCAGCA
ACATCACCCCAGAGCCCTGACTTAAAATCCAAAGGCACGTCCCTGACAGCTGAAAATAGC
ACGGGGAGGAATAATGCGGACACTTTTGAGGACAAGTTACACCTCCACTCAGCACTCTGG
ACTCCACGATGCCTTTGA

Restriction Sites: Please inquire

ACCN:	NM_001177387
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
OTI Annotation:	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
Components:	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
Reconstitution Method:	1. Centrifuge at 5,000xg for 5min. 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA. 3. Close the tube and incubate for 10 minutes at room temperature. 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom. 5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
RefSeq:	NM_001177387.1, NP_001170858.1
RefSeq Size:	6866 bp
RefSeq ORF:	2838 bp
Locus ID:	6314
UniProt ID:	O15265
Cytogenetics:	3p14.1

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 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 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]
Transcript Variant: This variant (SCA7b) includes an alternate exon that causes a frameshift in the 3' coding region, compared to variant SCA7a, resulting in an isoform (b) with a distinct and longer C-terminus, compared to isoform a. The 5' UTR is incomplete in this variant due to the presence of alternate splicing choices further upstream. There are no publicly available full-length transcripts representing this variant; it is represented based on data in PMID:12533095. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.