

Product datasheet for MC218537

Atxn3 (NM_001167914) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Atxn3 (NM_001167914) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Atxn3
Synonyms:	2210008M02Rik; AI463012; AI647473; ataxin-3; ATX3; Mjd; MJD1; Sca3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>MC218537 representing NM_001167914 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGAGTCCATCTCCACGAGAAACAAGAAGGCTCACTTTGTGCTCAGCATTGCCTGAATAACCTATTGC
AAGGAGAGTATTTAGCCCTGTGGAGCTATCCTCAATTGCACACCAGCTGGATGAAGAGGAGAGGCTGAG
AATGGCAGAAGGGGGAGTCACTAGTGAAGACTACCGCACATTTTACAGCAGCCTTCTGAAATATGGAT
GACAGCGGCTTTTCTCTATTCAAGTTATAAGCAATGCTTTGAAAGTTGGGTTTGAAGTAACTCTGT
TCAACAGTCCAGAGTACCAGAGGCTCAGAATTGATCCTATAAACGAAAGATCCTTTATATGCAATTATAA
AGAACACTGGTTTACAGTTAGAAAATTAGGCAAGCAGTGGTTAACTTGAATTCTCTGTTGACGGGTCCA
GAATTAATATCAGATACATACCTCGCACTATTCTTGGCTCAATTACAGCAAGAAGTTATTCTATATTTG
TTGTTAAGGGTGATCTGCCAGATTGTGAAGCTGACCACTTTTGCAGATGATCAAGGTCCAACAGATGCA
TCGACCAAACTTATTGGAGAGGAACCTGCACATCTGAAAGAGCAGAGTGCCTCAAAGCAGACCTGGAG
CGCGTCTTAGAAGCAGCTGATGGGTCGGGCATATTTGATGAAGATGAGGATGATTTACAGAGGGCTCTAG
CCATAAGTCGCCAGGAAATCGACATGGAGGATGAAGAAGCTGATCTCCGAGGGCCATTCAGCTCAGTAT
GCAAGGTAGTCCAGAAGTATGTGTGAAAATAGTCCACAGACATCAAGTCCAGATCTCTCTTCAGAAGAG
CTGCGGAGGAGACGAGAAGCCTACTTTGAAAAGTAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites:	Sgfl-MluI
ACCN:	NM_001167914
Insert Size:	876 bp



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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).
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:	<ol style="list-style-type: none">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:	<u>NM_001167914.1, NP_001161386.1</u>
RefSeq Size:	1032 bp
RefSeq ORF:	876 bp
Locus ID:	110616
Cytogenetics:	12 E
Gene Summary:	<p>Deubiquitinating enzyme involved in protein homeostasis maintenance, transcription, cytoskeleton regulation, myogenesis and degradation of misfolded chaperone substrates (By similarity). Binds long polyubiquitin chains and trims them, while it has weak or no activity against chains of 4 or less ubiquitins (By similarity). Involved in degradation of misfolded chaperone substrates via its interaction with STUB1/CHIP: recruited to monoubiquitinated STUB1/CHIP, and restricts the length of ubiquitin chain attached to STUB1/CHIP substrates and preventing further chain extension (PubMed:21855799). Interacts with key regulators of transcription and represses transcription: acts as a histone-binding protein that regulates transcription (By similarity). Regulates autophagy via the deubiquitination of 'Lys-402' of BECN1 leading to the stabilization of BECN1 (PubMed:28445460).[UniProtKB/Swiss-Prot Function]</p> <p>Transcript Variant: This variant (2) differs at the 3' end compared to variant 1, resulting in an isoform (2) with a shorter C-terminus compared to isoform 1.</p>