OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for MR204111

Atxn3 (NM_001167914) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Atxn3 (NM_001167914) Mouse Tagged ORF Clone
Tag:	Myc-DDK
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)

ORF Nucleotide Sequence:

>MR204111 representing NM_001167914
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGAGTCCATCTTCCACGAGAAACAAGAAGGCTCACTTTGTGCTCAGCATTGCCTGAATAACCTATTGC
AAGGAGAGTATTTTAGCCCTGTGGAGCTATCCTCAATTGCACACCAGCTGGATGAAGAGGAGAGGCTGAG
AATGGCAGAAGGGGGAGTCACTAGTGAAGACTACCGCACATTTTTACAGCAGCCTTCTGGAAATATGGAT
GACAGCGGCTTTTTCTCTATTCAAGTTATAAGCAATGCTTTGAAAGTTTGGGGTTTAGAACTAATCCTGT
TCAACAGTCCAGAGTACCAGAGGCTCAGAATTGATCCTATAAACGAAAGATCCTTTATATGCAATTATAA
AGAACACTGGTTTACAGTTAGAAAATTAGGCAAGCAGTGGTTTAACTTGAATTCTCTGTTGACGGGTCCA
GAATTAATATCAGATACATACCTCGCACTATTCTTGGCTCAATTACAGCAAGAAGGTTATTCTATATTTG
TTGTTAAGGGTGATCTGCCAGATTGTGAAGCTGACCAACTTTTGCAGATGATCAAGGTCCAACAGATGCA
TCGACCAAAACTTATTGGAGAGGAACTTGCACATCTGAAAGAGCAGAGTGCCCTCAAAGCAGACCTGGAG
CGCGTCTTAGAAGCAGCTGATGGGTCGGGCATATTTGATGAAGATGAGGATGATTTACAGAGGGCTCTAG
CCATAAGTCGCCAGGAAATCGACATGGAGGATGAAGAAGCTGATCTCCGCAGGGCCATTCAGCTCAGTAT
GCAAGGTAGTTCCAGAAGTATGTGTGAAAATAGTCCACAGACATCAAGTCCAGATCTCTCTTCAGAAGAG
CTGCGGAGGAGACGAGAAGCCTACTTTGAAAAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

View online »

Protein Sequence:

>MR204111 representing NM_001167914
Red=Cloning site Green=Tags(s)

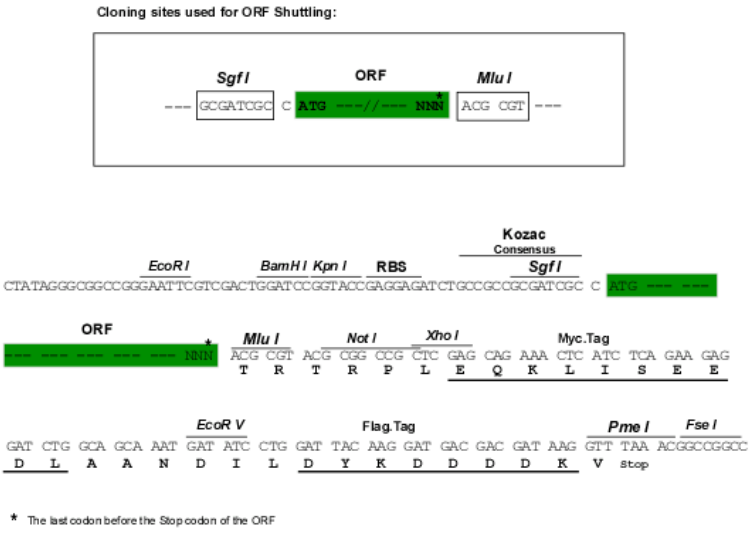
MESIFHEKQEGSLCAQHCLNNLLQGEYFSPVELSSIAHQLDEEERLRMAEGGVTSEDYRTFLQQPSGNMD
DSGFFSIQVISNALKVWGLELILFNSPEYQRLRIDPINERSFICNYKEHWFTVRKLGKQWFNLNSLLTGP
ELISDTYLALFLAQLQQEGYSIFVVKGDLPDCEADQLLQMIKVQQMHRPKLIGEELAHLKEQSALKADLE
RVLEAADGSGIFDEDEDDLQRALAISRQEIDMEDEEADLRRAIQLSMQGSSRSMCENSPQTSSPDLSSEE
LRRRREAYFEK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mm9036_b07.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001167914

ORF Size: 873 bp

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.

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_001167914.1, NP_001161386.1

RefSeq Size: 1032 bp

RefSeq ORF: 876 bp

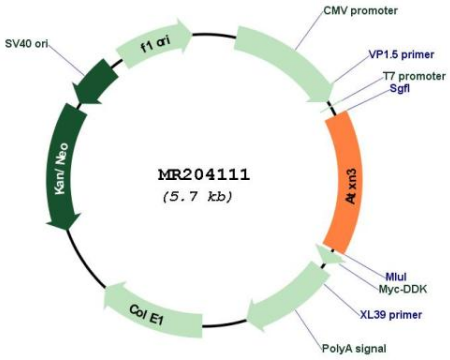
Locus ID: 110616

Cytogenetics: 12 E

MW: 33.9 kDa

Gene Summary: 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]

Product images:



Circular map for MR204111