

Product datasheet for MC214948

Otulin (NM_001013792) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Otulin (NM_001013792) Mouse Untagged Clone
Tag: Tag Free
Symbol: Otulin
Synonyms: C79097; Fam105b; m3Sapc; m7-1Sapc
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >MC214948 representing NM_001013792
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**GCGATCGCC**

ATGAGTCGGGGAACCATGCCCCAGCCCGGAGCGTGGCCCGGTGCAAGCTGCGCCGAGACGCCGGCGCGCG
AGGCCGGGGCCGCGCGGGACGGCGGAAGGTGACGGCCGGCGCAGCCCCGGCCGCGACCGGATG
CCCGGCCGAGCAGGAGGACATGTACCGTGTGCAGATGAAATAGAAAAGGAGAAAGAATTGCTAATA
CATGAAAGAGGGATATCAGAACCAGGTTAAGTGTGGCTCCTGAAATGGATATCATGGACTACTGCAAAA
AAGAATGGAGAGGAAATACTCAGAAAGCCACATGTATGAAAAAGGGCTATGAGGAAGTGTCTCAGAAATT
CACTTCCATAAGGCGAGTCCGTGGTGATAACTACTGTGCACTGAGGGCCACACTGTTCCAGGCCATGAGC
CAGCTGGCCGAGCTGCCCCCTGGCTGCAGGACTTGGAGCTCATACTGTTACCAGAGAAGCTGATAAACA
AGTATACCTGGATCAAGCAGTGGAACTTGGACTGAAATTTGATGGGAAGAGTGAGGACCTGGTTGAAAA
AATTAAGGAATCCCTTGCCCTGCTAAGGAAGAAGTGGTAAGCCTGGCTGCAATGAAAAGTCTGAAGCG
AGGCAGACAGCTTGTGATGAGCTGTTACCAACGAAGAGGAGGAGTACAGCCTCTACGAAGCTGTGAAGT
TCCTGATGTTAAACAGAGCCATCGAATGTACGATGACAAGGAGAAGGAAAGGAATGCCGTTCTTCTC
TGTGCTCTTGTGGCCGAGACACATCCAATGACCCTGAACAGCTCCTGAGGAACCACCTAAACCCAGGTG
GGACACACGGGGGCCTTGAGCAGGTTGAGATGTTCTTCTTGCCTATGCTGTCCGCCACAGCATCCGGG
TGTACCGCTGTCCAAGTATAACACAGAGGAGTTCATCACAGTCTACCCCACTGATCCCCCAAGGACTG
GCCAATGGTGACCCTCATAGCTGAGGATGATCGGCACTATAACATCCCTGTGAGAGTGTGTGAGGAGACC
AGTGTGTGA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI
ACCN: NM_001013792



Insert Size:	1059 bp
OTI Disclaimer:	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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</p>
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:	NM_001013792.2 , NP_001013814.2
RefSeq Size:	1491 bp
RefSeq ORF:	1059 bp
Locus ID:	432940
UniProt ID:	Q3UCV8
Cytogenetics:	15 B1

Gene Summary:

Deubiquitinase that specifically removes linear ('Met-1'-linked) polyubiquitin chains to substrates and acts as a regulator of angiogenesis and innate immune response (PubMed:23708998, PubMed:27523608, PubMed:29950720). Required during angiogenesis, craniofacial and neuronal development by regulating the canonical Wnt signaling together with the LUBAC complex (PubMed:23708998). Acts as a negative regulator of NF-kappa-B by regulating the activity of the LUBAC complex (By similarity). OTULIN function is mainly restricted to homeostasis of the LUBAC complex: acts by removing 'Met-1'-linked autoubiquitination of the LUBAC complex, thereby preventing inactivation of the LUBAC complex (PubMed:29950720). Acts as a key negative regulator of inflammation by restricting spontaneous inflammation and maintaining immune homeostasis (PubMed:27523608, PubMed:29950720). In myeloid cell, required to prevent unwarranted secretion of cytokines leading to inflammation and autoimmunity by restricting linear polyubiquitin formation (PubMed:27523608). Plays a role in innate immune response by restricting linear polyubiquitin formation on LUBAC complex in response to NOD2 stimulation, probably to limit NOD2-dependent proinflammatory signaling (By similarity).[UniProtKB/Swiss-Prot Function]