

Product datasheet for **MC221711**

Afg3l2 (NM_027130) Mouse Untagged Clone

Product data:

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| Product Type: | Expression Plasmids |
| Product Name: | Afg3l2 (NM_027130) Mouse Untagged Clone |
| Tag: | Tag Free |
| Symbol: | Afg3l2 |
| Synonyms: | 2310036I02Rik; AW260507; Emv66; par |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-Entry (PS100001) |
| E. coli Selection: | Kanamycin (25 ug/mL) |



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Fully Sequenced ORF: >MC221711 representing NM_027130
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCCACCGCTGCCTGCTGTGGAGCCGGGCGGCTGCCGTCGCGCCTTCTCCCCTGCTCGTGC
 CCAGAGGTTGCCTGGGTCGGACCGCGGCCCTGCCTCCGTACGCTCTATCAATATGCTACTGTCCAGAC
 AGCAAGCAGCAGGCGTTCTCTGCTGAGGGATGTAATTGCTGCTTATCAAAGATTCTGTTCTCGACCTCCC
 AAAGGATTTGAAAAGTACTTTCTAATGGGAAAAACGGAAAAAGGCCAGTGAGCCTAAGGAGGCTGTTG
 GAGAAAAAAGAACCACAGCCCTCGGGCCCCAGCCTTCTGGAGGTGCAGGTGGTGGGGGAGGGAAGCG
 CCGTGGCAAGAAAGAAGATTCTCACTGGTGGTCCAGGTTCCAGAAGGGTGACTTCCCATGGGATGACAAG
 GATTTCAAGATGACTTTCTCTGGACTGCTTTTTTTGGGGTGGAGTCATGATTTACTTCGTGTTCAAGA
 GCTCTGGGAGAGAAATCACGTGGAAGACTTTGTCAATAACTATCTTTCTAAGGGCGTGGTGACAGACT
 AGAAGTTGTCAACAAGCGTTTTGTTCGTGTGACCTTTACACCAGGAAAACTCCGGTTGATGGGCAATAC
 GTCTGGTTAATATTGGCAGTGTGACACATTTGAGCGGAATCTGGAGACTTTGCAGCAAGAATTGGGCA
 TAGAAGGGGAGAACC GGTCCTGTGGTTATATTGCTGAGAGCGATGGCTCCTTCTGCTGAGCATGTT
 GCCCACGTACTCATTATCGCTTTTCTACTCTACACCAATAAGAAGAGGGCCCGCTGGCATTGGTCGGACC
 GGCCGGGGAATGGGTGGACTCTTCAGCGTTGGGAAAACACAGCCAAGGTCTAAAGGATGAGATAGATG
 TGAAGTTAAAGATGTGGCTGGCTGTGAGGAGGCCAAGCTAGAAATAATGGAATTCGTGAATTTCTTGAA
 AAACCCAAAGCAATATCAAGACCTAGGAGCAAAAATCCCAAAGGGTGCCATTCTCACCGTCCCCAGGT
 ACTGGGAAGACGCTGCTAGCTAAGGCCACAGCTGGAGAAGCCAATGTCCCCTTTACTACTGTGAGCGGAT
 CTGAGTTCTGGAGATGTTTGTGGCGTTGGTCCAGCCAGAGTCCGAGACTTATTTGCCCTTGTCTGGAA
 GAATGCGCCTTGCAATCTCTTCAATTGATGAGATTGATGCTGTGGGAAGGAAGCGCGCAGAGGCAATTC
 GGTGGCAGAGCGAGCAGGAGAACAACACTCAACCAGCTGCTTGTGGAGATGGACGGCTTCAACACAACCA
 CCAATGTGGTCATCCTGGCAGGCACAAATCGACCAGACATCCTGGATCCAGCTCTGTTGAGACCAGGCCG
 CTTTGACAGGCAGATTTTTATTGGACCCCGACACATAAAAGGACGAGCCTCAATCTTCAAAGTTCACCTT
 CGACCATTGAAGCTGGACAGTGCCTTGGAAAAAGATAAATTGGCCAGAAAAGTGGCGTCTTAACCTCAG
 GGTTTTCAGGCGCTGATGTTGCCAATGTCTGCAATGAAGCTGCTTTGATTGCTGCAAGACACCTTTCAGA
 TGCCATTAATGAGAAGCACTTCGAACAAGCGATTGAGCGAGTGATTGGAGGCTTGGAGAAAAAACCCAA
 GTTCTGCAGCCTGAGGAGAAGAAGACGGTGGCTTACCACGAAGCAGGCCATGCGGTGCTGGCTGGTATC
 TGGAGCATGCAGACCCACTCTTAAAGGTCTCCATCATCCCGCTGGCAAGGGGCTGGGCTATGCTCAGTA
 CTTGCCAAAGGAGCAGTATCTGTACACAAGGAGCAGCTGCTGGACAGGATGTGCATGACTCTGGGCGGC
 CGTGTCTCCGAGGAGATCTTCTTTGGGAGAATTACAACCGGTGCCAGGACGACTTGAGGAAGGTTACCC
 AGAGTGCCTATGCCAGATCGTTTCAAGTTGGCATGAACGAGAAAGTGGGGCAGATCTCCTTTGACCTCCC
 ACGACAGGGGGACATGGTGTAGAGAAGCCTTACAGTGAGGCCACTGCGAGGATGATAGACGATGAAGTG
 AGGATACTCATCAGCGATGCCTACAGAAGGACGGTGGCTCTTCTCACAGAGAAGAAGGCTGACGTGGAGA
 AGGTCGCTCTTACTGTTAGAAAAGGAAGTCTTAGACAAGAATGACATGGTCCAGCTTCTCGGTCCCAG
 ACCATTTACAGAAAAGTCCACATATGAAGAATTTGTGGAAGGCACTGGCAGCTTAGACGAGGACACTTCT
 CTTCTGAAGGCCCTCAGGATTGGAACAAGGAGCGGGAGAAGGAGGAGAAGAAGGAGAAGGAGAAGGAGG
 AGCCGCTGAATGAGAAGGTTGTCAAGTAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI
ACCN: NM_027130
Insert Size: 2409 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: | NM_027130.1 , NP_081406.1 |
| RefSeq Size: | 3086 bp |
| RefSeq ORF: | 2409 bp |
| Locus ID: | 69597 |
| UniProt ID: | Q8JZQ2 |
| Cytogenetics: | 18 E1 |
| Gene Summary: | ATP-dependent protease which is essential for axonal and neuron development (PubMed:18337413, PubMed:27642048). In neurons, mediates degradation of SMDT1/EMRE before its assembly with the uniporter complex, limiting the availability of SMDT1/EMRE for MCU assembly and promoting efficient assembly of gatekeeper subunits with MCU (By similarity). Required for the maturation of paraplegin (SPG7) after its cleavage by mitochondrial-processing peptidase (MPP), converting it into a proteolytically active mature form.[UniProtKB/Swiss-Prot Function] |