

Product datasheet for **MC220835**

Appl1 (NM_145221) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Appl1 (NM_145221) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Appl1
Synonyms:	2900057D21Rik; 7330406P05Rik; A1585782; AW209077; BB022931; C88264; DIP13
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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Fully Sequenced ORF: >MC220835 representing NM_145221
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGCCGGGATCGACAAGCTGCCATTGAAGAGACCTGGAGGACAGTCCGCAGACAAGGTCTTTACTTG
 GTGATTTGAAGAAGATGCTACTGCTATTTCAAATTATATGAACCAATTGTATCAAGCTATGCATCGGAT
 TTATGATGCACAGAATGAATTGAGTGCAGCAACACACCTGACTTCGAAACTTTTGAAGAATATGAAAA
 CAGCGTTTTCTTTGGGGGTGATGATGAAGTTATGAGCTCTACTTTGCAGCAGTTTTCCAAGGTCATAG
 ATGAGCTTAGTCTTGTGCATGCAGTACTTTCAACTCAACTTGCTGATGCCATGATGTTCCCATTCCCA
 GTTTAAAGAAAGAGATCTGAAAGAAATATTGACACTAAAGGAGGTATTTCAAATTGCTAGTAATGATCAT
 GATGCCCAATTAATAGGTACAGTCGGTTGTCAAAAAGAGAGAAAATGACAAGGTAATAATGAAGTTA
 CAGAGGATGTATACTCCAGGAAAAACAACACCAGACCATGATGCATTATTTTTGTGACTAAATAC
 TCTTCAGTACAAGAAGAAAATAGCTTTGTTAGAACCTCTACTGGGATACATGCAGGCTCAGATAAGTTTC
 TTTAAGATGGGTTCTGAAAATCTCAATGGACAACCTGGAAGAATCTTAGCTAACATTGGAACAAGTGATC
 AGAATGTTTCAAGAGAAAATGGATGGTGTGTAGAGACCATGCAGCAGACAATAGAAGACTTGGAGGTAGC
 CAGTGACCCTTTATCTGCCTGACCCGGATCCCACCAAGTTTCCCATCAATCGAAATTTAACCCGAAAAG
 GCTGGATACCTAAATGCTAGGAATAAACAGGCTTGGTGTCTACCTGGGATAGACAGTTTTACTTCA
 CGCAGGGTGGAACTTAATGAGTCAAGCCCGTGGAGATGTGGCAGGAGGCTAGCCATGGACATAGACAA
 CTGTTCAAGTGTGGCTGTGGACTGTGAAGACAGACGATACTGTTTTAGATCACTTCTTTTGTGAAAA
 AAATCTTCAATATTGCAAGCAGAGAGTAAAAAGACCATGAAGAGTGGATCTGTACAATAAACAACATAT
 CTAACAACATATATTTGAGTGAATAACAGAGGAACTGCTGCAGAGTGAATCAGTCTGCTCTAGAAGC
 TGTCACTCCTTCCCCTCTTTCCAGCAGAGACAGAGAGCCTGCGTCCAGGAGGACAATCTCGGCCACCA
 ACAGCTCGAACAGCAGTTCAGGATCCTTGGGATCAGAGTCTACAATTTGGCTGCCCTCTCTAGATT
 CTCTTGTGCTCCGATACACCAATACAGTTTGTATAATTTCTCCTGTGTGTGAAGATCAGCCTGGCCA
 GGCAAAAGCCTTTGGTCAAGGAGGCGAGGTACAATCCATTTGGAGAATCTGGAGGAAGCACAATAATCA
 GAAACAGAAGACTCTATTCTTCATCAGTTATTTATGTCGGATTCTTGGTTCTATGGAGGTAAAGTCAG
 ATGACCATCCAGATGTTGTCTATGAAACAATGCGCCAGATCTTAGCTGCTCGGGCCATCCACAACATCTT
 TCGTATGACAGAATCACATTTATTAGTCACTTGTGACTGCTTGAAGTTAATTGATCCGCAGACCCAAGTT
 ACAAGGCTCACATTTCCATTGCCGTGTGTAGTTCTGTATGCTACGCCAGGAAAATAAACGACTTTTTG
 GATTTGTTCTCCGACATCAGGCCGAAGAAGTGAGAGTAATTTGTCATCAGTCTGCTATATATTTGAATC
 AAACAATGAGGGAGAAAAGATTTGTGATTCTGTTGGACTGGCAAAACAGATAGCTTTGCATGCTGAACTG
 GATCGTAGGGCATCAGAAAAACAAAAGAAATAGAGAGAGTAAAAGAGAAAACAGCAGAAAGAGCTCAGCA
 AACAGAAACAGATTGAGAAGGACTTGAAGAACAGAGTCGGTTGATAGCTGCCTCCAGTAGACCAAAACCA
 GGCTGGTAGTGAGGGCCAGCTTGTCTTAGCAGTAGCCAATCAGAGGAGAGTGATTTGGGAGAAGAAGGG
 AAAAAAGAGAGTCGGAAGCA**TAA**

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI

ACCN: NM_145221

Insert Size: 2124 bp

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_145221.2</u> , <u>NP_660256.1</u>
RefSeq Size:	6961 bp
RefSeq ORF:	2124 bp
Locus ID:	72993
UniProt ID:	<u>Q8K3H0</u>
Cytogenetics:	14 A3
Gene Summary:	Multifunctional adapter protein that binds to various membrane receptors, nuclear factors and signaling proteins to regulate many processes, such as cell proliferation, immune response, endosomal trafficking and cell metabolism (By similarity) (PubMed:25328665, PubMed:25568335, PubMed:27219021). Regulates signaling pathway leading to cell proliferation through interaction with RAB5A and subunits of the NuRD/MeCP1 complex (By similarity). Functions as a positive regulator of innate immune response via activation of AKT1 signaling pathway by forming a complex with APPL1 and PIK3R1 (PubMed:25328665). Inhibits Fc-gamma receptor-mediated phagocytosis through PI3K/Akt signaling in macrophages (PubMed:25568335). Regulates TLR4 signaling in activated macrophages (PubMed:27219021). Involved in trafficking of the TGFBR1 from the endosomes to the nucleus via microtubules in a TRAF6-dependent manner. Plays a role in cell metabolism by regulating adiponectin and insulin signaling pathways (By similarity). Required for fibroblast migration through HGF cell signaling (PubMed:26445298). Positive regulator of beta-catenin/TCF-dependent transcription through direct interaction with RUVBL2/reptin resulting in the relief of RUVBL2-mediated repression of beta-catenin/TCF target genes by modulating the interactions within the beta-catenin-reptin-HDAC complex (By similarity).[UniProtKB/Swiss-Prot Function]