

Product datasheet for MC223620

Daam2 (NM_001008231) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Daam2 (NM_001008231) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Daam2
Synonyms:	2310016D11Rik; AI843643; AW557870
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>MC223620 representing NM_001008231 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCCCTCCGCAAGAGGAGTCTCATGGCCTGGGCTTCCTTTGCTGCTTTGGAGGCAGTGACCTCCCG
AGATCGACCTCCGGGACAGCCACCCACTGCAGTATCTGGAGTTCTCCGGTCCCATCCCGAATCCTGAGGA
GCTCAATGTCCGCTTTGCAGAGCTGGTGGATGAATTGGACCTCACAGATAAAAACCGAGAGGCTGTGTTT
GCACTACCACCCGAGAAGAAATGGCAGATCTACTGCAGCAAGAGGAAGGAGCAGGAGGATCCCAACAAGC
TGGCAACCAGTTGGCCTGAGTACTACATTGATCGTATCAATGCCATGGCCGCCATGCAGAATCTGTATGA
AACTGAAGATGAGGAGACAGACAAGAGGAACCAAGTTGTAGAAGACCTGAAGACAGCCCTCCGGACACAA
CCCATGAGGTTTGTGACCCGCTTCATCGATCTGGAAGGCCTGACCTGTCTGCTGAATTTCTCCGGGGCA
TGGACCACACCACCTGTGAAAGCCGCATCCACACATCTCTCATTGGCTGCATCAAGGCTCTGATGAACAA
CTCTCAGGGCCGGGCACACGTCTGGCACAACCTGAGGCCATCAGCATCATCGCTCAGAGCCTGCGCACA
GAGAACAGCAAGACCAAGTTGCAGTGTGGAGATCCTGGGTGCAGTGTGCCTTGTACCCGGAGGCCACA
AGAAGTTCTACAGGCCATGCTACACTATCAGGCGTATGCAGCCGAGCGCACTCGTTCCAGACTTTGCT
GAATGAACCTGGATCGAAGCTTAGGCCGCTACCCGGATGAGGTAACCTGAAGACAGCCATCATGTCTTC
ATCAATGCTGCTCAATGCTGGCGCTGGAGAGGATAACCTGGAATTCGGCTCATCTCCGGTATGAT
TCCTGATGCTGGGGATCCAGCCAGTGATTGATAAACTCCGGCAACACGAGAATGCCATCCTGGACAAGCA
TTTAGACTTCTTTGAGATGGTCCGGAATGAGGATGACCTGGAGCTAGCCAGGAGTTTGACATGGTCCAC
ATTGACACAAAAAGTGCCTCCCAGATGTTTGGCTGATCCACAAGAAGCTGAAGCACACGGAAGCCTATC
CCTGCCTGCTCTGTCTGCACCCTGCCTGCAGATGCCCTACAAGCGAATGGTGGCTACTTCCAGCA
GTGGCAGCTCCTGGACCGAATCCTTCAACAGATTGCTCCTCCAGGATGAGCGAGGGGTGGACCCTGACCTG
GCCCCACTGGAATACTTAAATGTCAAGAACATCGTTAACATGCTCATCAATGAGAATGAGGTGAAGCAGT
GGAGGGACCAGGCAGAGAAGTTTCGAAAGAACACATGGAACCTCATGAGCCGGCTGGAGAGAAAAGAGCG
GGAATGTGAGACAAAGACTGGAGAAGGAGGATGATGCGGACGCTCAACAAGATGAAGGACAAACTG



GCCCCGAGTCCCAGGAGCTGCGCCAAGCTAGGGGACAAGTGGCAGAGCTGGTAGCCCGACATAATGAGA
 GCTCAACCGGCCCGGTGTCTCCCCACCTCCCCCTGGAGGTCCACTCACCTTGTCTTCTCCAGGACAAC
 CAATGATCTGCCTCCACCCCAACCACTCTCCCTTTGATAGTGCACCCCAACCCGACCCACCCCTC
 CCTCCCGAGGGCCTCCCATCCCCCAGGTGCCCCACCCTGCTTCAGCTCAGGCCACCCCACTCATG
 ACCCTTCTCCAGCAATGAAGCCCCACTCAGAAAAAGCGATTCCCCAGCCTTCACACCACTGAAGTC
 CTTCAACTGGGTCAAGCTGAATGAGGAGCGTGTCTGGCACCGTGTGAATGAAATTGATGACTCGCAG
 GTATTTCCGATTCTGGACTGGAAGACTTTGAAAAAATGTTCTCGCATATCAGAGGCACCAAGCTTGCA
 TGCAGGAGGGGCCAGAGAGAGAGAGAAATGTGAGAGACGGAGGGCGGCGAGCAGACCTCTGCCAGC
 TGTGGAGGCGAGTGCCACAGAAGTGAAGGCTTCTAGGTCTATGGTATCAGCTACAGGTGCCAAGAAA
 GAACTGGGCTCCACGGAGGACATCTACATAACCTCCCGCAAGGTTAAAGAGCTGTCAGTCATCGATGGC
 GGAGGGCCAGAACTGTATCATTCTTCTCCAAGCTGAAGCTTTCTAATGATGAAATACGGCAGGCCAT
 CTTGCGGATGGATGAACAAGAAGACCTCGCTAAGGACATGCTGGAGCAGCTTCTCAAGTTCATCCCCGAG
 AAGAGCGACATTGATCTCTAGAAGAGCACAAACATGAGATTGAGAGGATGGCGCGTGCAGATCGTTCC
 TCTATGAAATGAGCAGGATCGACCATTACCAGCAACGGCTACAGGCCCTGTTCTTCAAGAAGAAGTTCCA
 GGAACGCCTGGCTGAGGCCAAGCCAAAGTAGAAGCCATCCTGCTGGCCTCCCGGAGCTGACTCTCAGC
 CAGCGCCTGAAGCAAATGCTGGAGGTGGTCTAGCCATCGGCAACTTCATGAACAAGGGGAGCGTGGCG
 GTGCCATGGCTTCCGGGTAGCCAGTCTCAACAAGATCGCTGACACCAAGTCCAGCATTGACAGGAACAT
 CTCTCTGCTTATTACCTGATCATGATCCTGGAGAAGCACTTCCCAGATATCCTGAACATGCCCTCAGAG
 CTAAGACCTATCAGAAGCTGCCAAAGTCAACCTGGCAGAGCTGGAGAAGGAGGTGAGCATTCTCAGGA
 GAGGCCTCCGAGCAGTGGAAAGTGGAGTTGGAATATCAGAGACACCAGGCACGAGACCCCAATGACAAAGT
 CGTCCCTGTATGAGTGACTTTCATCACAGTGTCTAGCTTCAGCTTCTCAGAGCTGGAGGACCAGCTGAAT
 GAGGCCAGGGACAAGTTTGCCAAGGCACTGACACATTTGAGAGAGCAGGAGAGTAAGATGCAACCCGATG
 AATTTTGGCATCTTCGACACCTTCTGCAGGCTTCTTGGAGGCCCGCAGGACCTGGAGGCCATGCG
 GAGGAGGAAGGAGGAAGATGAGCGGAGAGCACGTATGGAATTCATGTTGAAGGAACAGCGTGAGAAAGAG
 AGATGGCAGAGGAGAGGAAGTCTGGCTGGCGGCCCTGGAGGAGAGCGCGAGTTTATGACCTAG
 TGTGAGCCTGCGCTCTGGAGAAGTTTTGATAAGGACTTAAGCAAGTTCAAGCGCAACCGAAGCGGCC
 CCGGAGCCAGGTTCCGGAGGTCACCCGCGAGCGGGCCATAAACAGGCTAAATTATGGA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

- Restriction Sites:** Sgfl-Mlul
- ACCN:** NM_001008231
- Insert Size:** 3348 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:**
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_001008231.2](#), [NP_001008232.2](#)
RefSeq Size: 6045 bp
RefSeq ORF: 3348 bp
Locus ID: 76441
UniProt ID: [Q80U19](#)
Cytogenetics: 17 C

Gene Summary: Key regulator of the Wnt signaling pathway, which is required for various processes during development, such as dorsal patterning, determination of left/right symmetry or myelination in the central nervous system (PubMed:22227309, PubMed:24091014, PubMed:25754822). Acts downstream of Wnt ligands and upstream of beta-catenin (CTNNB1) (PubMed:22227309, PubMed:25754822). Required for canonical Wnt signaling pathway during patterning in the dorsal spinal cord by promoting the aggregation of Disheveled (Dvl) complexes, thereby clustering and formation of Wnt receptor signalosomes and potentiating Wnt activity (PubMed:22227309). During dorsal patterning of the spinal cord, inhibits oligodendrocytes differentiation via interaction with PIP5K1A (PubMed:25754822). Also regulates non-canonical Wnt signaling pathway (PubMed:24091014). Acts downstream of PITX2 in the developing gut and is required for left/right asymmetry within dorsal mesentery: affects mesenchymal condensation by lengthening cadherin-based junctions through WNT5A and non-canonical Wnt signaling, inducing polarized condensation in the left dorsal mesentery necessary to initiate gut rotation (PubMed:24091014). Together with DAAM1, required for myocardial maturation and sarcomere assembly (PubMed:26526197).[UniProtKB/Swiss-Prot Function]