

Product datasheet for MC225120

Dscam (NM_031174) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Dscam (NM_031174) Mouse Untagged Clone
Tag: Tag Free
Symbol: Dscam
Synonyms: 4932410A21Rik
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >MC225120 representing NM_031174
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGTGGATACTGGCTCTCTCCTTGTCCAGAGCTTCGCGAATGTTTTAGTGAAGAGCCCCACTCCAGCC
 TCTACTTTGTCAATGCATCGCTGCAAGAGGTAGTGTTCGCAAGCACATCGGGACGCTGGTCCCTGCC
 GGCTGCAGGCATCCCTCCTGTGACTCTCAGATGGTACCTAGCAACGGGCGAGGAGATCTACGATGTCC
 GGGATCCGCCACGTCCATCCCAATGGCACTCTCCAAATTTCCCTTTCTCCTTCAAGCTTCAGACCT
 TAATCCATGATAACTTACTATTGCACAGCTGAAAACCTTCAGGGAAAATTAGAAGTCAGGATGTCCA
 CATCAAGGCTGTTTTACGGGAGCCCTATACAGTCCGTGTGGAGGACCAGAAAACCATGAGAGGCAATGTC
 GCGGTGTTCAAGTGCATTATCCCTCCTCGGTGGAGGCGTACGTCACTGTCGTCTCATGGGAGAAAGACA
 CGGTTTCACTTGTCTCAGGATCTAGATTCTCATCACATCCACGGGAGCCTTGTATATTAAGATGTACA
 GAACGAAGATGGGCTGTACAACCTACCGCTGCATCACGGGCACAGATACACAGGGGAGACGAGACAAAGC
 AACAGCGGAGACTGTTCTGTGTCAGACCCAGCAAACCTCAGCCCCATCCATCCTGGACGGGTTTGACCACC
 GCAAAGCCATGGCAGGGCAGCGGTGGAGCTGCCTTGCAAAGCACTTGGGCACCCCGAGCCAGACTACCG
 CTGGCTGAAGGACAACATGCCCTGGAACCTTCTGGAAGGTTCCAAAAGACAGTACTGGGTTGCTCATT
 GAGAACAGCCGCCCTCAGACTCAGGCAGCTATGTGTGTAAGTATCCAACCGATATGGCACTGCCAAGG
 TGATAGGCCCGCTGTACGTGAAACAGCCACTGAAAGCCACCATCAGTCCCAGAAAGGTTAAAAGCAGCGT
 GGGCAGCCAGGTCTCCTTATCCTGCAGTGTGACAGGAAATGAAGACCAGGAACTCTCCTGGTACCGAAAT
 GGCGAAATCCTCAACCTGAAAAAACGTGAGGATCACAGGACTCAACCACGAAACCTTATAATGGATC
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 TGTCAGGTGGTCTTGAAGACGGAACCTCCAAAATCATTCTGCCTTTAGCGAGAAAGTGGTGAGCCCG
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 CTACCTGAATATCTCCAGCTCCAGGTCCGGGATGGGGTGTCTACCGCTGCACTGCCAACAACTCGGCT
 GGAGTCGTCTGTACCAGGCTCGAATAAACGTAAGAGGGCCTGCAAGCATCAGACCAATGAAAAACATCA



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CTGCGATAGCGGGGCGTGACACGTACATCCACTGCCGCGTAATTGGCTATCCGTATTACTCCATCAAGTG
 GTACAAGAACGCTAACCTGCTTCCCTTCAACCACCGCCAGGTGGCGTTTGAGAACAATGGGACTCTGAAA
 CTCTCTGATGTGCAGAAAGAAGTTGACGAGGGAGAGTACACGTGTAATGTGCTGGTACAGCCACAGCTCT
 CCACCAGCCAGAGTGTCCACGTGACAGTGAAGTTCCACCTTTCATCCAACCTTTTGAGTCCCAAGATT
 CTCCATCGGGCAGCGGGTTTTATCCCATGTGTGGTGGTCTCAGGGGACTTACCCATCACCATCACCTGG
 CAGAAGGATGGCCGGCAATCCAGCAAGCCTCGGAGTAACCATTGACAACATTGACTTCACCAGCTCCC
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 GATGTGGGCGCAGACGTGACGAAGTCCATGTACCTCACAGTGAATAATCCTGCCATGATAACCTCTTACC
 CCAACACCACCCTGGCCACTCAGGGTCAAAGGAAGGAAATGAGCTGCACAGCCCATGGGAGAAGCCCAT
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 GGCAACAGCCCCATCACAGGCTATGACATTGAATGCAAAAATAAATCAGACTCCTGGGATTCTGCTCAA
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 CAGCAGCGGGGTAACCTCCAGTTCACATCATCAGTATCGACACCACCGGGGACAGCGAAGTGTACACC
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 CTTCTTCTCAGGAGATCATTACCACCACTCTGGAGGATGTACCCAGCTACCCTCTGAAAATGTCCAAGC
 CATAGCAACCTCACAGAAAGCATATCAATCTCCTGGTCCACACTGTCCAAGGAGGCCTTGAATGGGATT
 CTCCAGGGGTTCAGGGTCTACTGGGCCAACCTCATAGACGGAGAGCTGGGCGAGATTAAGAACGTCA
 CCACCACGACGCTTCTTGGAGTTGGATGGACTAGAGAAATACACCAACTACAGTATCCAGGTCCTGGC
 CTTACCCCGTGCAGGGGATGGCGTCCGGAGCGAGCAGATCTTACCCGTACCAAGGAGGACGTTCCAGGT
 CCTCTGCCGGTGTCAAGGCGGGCAGCCTCGGCCTCCATGGTCTTCGTGCTCTGGCTGCCCCCGCTGA
 AGCTGAACGGCATCATTGGAAGTACACAGTGTCTGCTCCATCCCTACCTACCGTCATCAGTGAGTT
 TGAAGCCTCCCCTGACTATTTTCTACAGAATCCCTAATCTGAGTCGGAATCGGCAGTATAGCGTCTGG
 GTGGTGGCGGTGACTTCCGCCGGAAGAGGCAACAGCAGCGAGATCATCACTGTGGAGCCCCTAGCTAAAG
 CTCCTGCACGGATCCTCACGTTACGCGGGACAGTGACTACTCCATGGATGAAGGACATTGTCTTGCCTTG
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 ACGATTGATGGCCGACAGGAGCATCTTACAGCAATGGGAGTTTCATCATTGCGACGGTGAAGCAGAGGACT
 CTGGCTATTACAGCTGTGTTGCCAATAACAACCTGGGGATCAGATGAGATCATATTAATTTGCAAGTACA
 AGTTCACCAGATCAGCCTCGGCTCACCATCCAAGACGACATCCTCCTCCATCACCCTCTCCTGGCTC
 CTTGGAGATAATGGGGTAGCTCCATTAGAGGCTACATCCTGCAATACTCCGAGGATAACAGTGAGCAGT
 GGGGACGCTTCCCATCAGCCCCAGCGAGCGTTCATACCGCTTGGAAAACCTAAAGTGTGGGACTTGGTA
 TAAGTTACCCCTTACTGCCAAAATGGAGTAGGTCCCGGGCGCATAAAGTAAATCATAGAAGCCAAAACC
 CTGGGAAAGAACCCAGTTCTCCAAGGAGCAGGAGCTCTTCGCCAGCATCAATACCACCCGAGTGAGGC
 TGAATCTGATTGGCTGGAATGACGGCGGCTGTCCAATCACCTCATTCACTCTTGAATACAGACCTTTTG
 GACCACGGTCTGGACCACAGCTCAGCGGACCTCCCTTCCAAGTCTACATTCTGTATGACCTGCAAGAA
 GCCACGTGGTATGAACTGCAGATGAGAGTGTGCAACAGCGCCGGTGTGCGGAGAAGCAAGCCAACCTCG
 CCACGCTGAACTACGATGGCAGTACAATCCCTCCACTCATTAAAGTCAGTTGTCCAAGCGAAGAAGGGCT
 GACAACCAACGAAGGGCTCAAGATCCTCGTGACCATCTCCTGCATCCTGGTGGGGTTCTACTGCTCTTT
 GTGCTTCTGCTGTTGTGCGGAGGAGACGGCGAGAGCAGAGGCTGAAGAGGCTGAGAGATGCAAAGAGTT
 TAGCTGAAATGCTCATGAGCAAAAACACACGGACTTCAGATACCTTAAGCAAACAGCAGCAGACTTTGAG
 AATGCACATTGATATACCAGGGCTCAGCTTTTGATTGAAGAGAGAGACACAATGGAGACCATAGATGAC
 CGCTCCACAGTCTGTTGACGGATGCTGACTTCGGGGAGGCAGCCAAACGAAGTCACTGACAGTGACTC
 ACACGGTGCAATACCAATCGGTGTCTCAGGCCACCGGGCCCTCGTGGATGTCTCCGATGCTCGGCCAGG

AACGAATCCCACCACCAGGAGGAATGCAAAGGCTGGACCCACAGCGAGAAACCGGTACGCCAGCCAGTGG
 ACGCTCAACAGACCCCATCTACCATCTCTGCACACACCCCTACCACAGACTGGAGACTGCCTACACCCA
 GGGCTACAGGATCCGTGGACAAGGAGAGCGACAGCTACAGCGTCAGCCCATCACAAGACACAGACCGAGC
 AAGAAGCAGCATGGTCTCCACAGAAAGTGCCTCCTCTACCTACGAAGAACTGGCCAGGGCCTATGAACAC
 GCCAAGATGGAAGAGCAGCTGAGGCATGCCAAGTTCACCATCACAGAGTGCTTCATATCCGATACGTCT
 CCGAGCAGTTGACGGCAGGGACAATGAGTACACGGACAGTCTGACCTCCAGTACCCCTTCAGAATCGGG
 GATCTGCAGATTCATGCATCTCCCCCAAACCTCAGGATGGAGGACGAGTGGTGAACATGGCGGTTCCA
 AAGGCCCATCGGCCAGGGACCTCATACCTGCCTCCATACCTACGAATGGACTTCTTGTTAAACCGGG
 GCGCACAGGCACCAGCAGGGACCTGAGTTTAGGACAAGCGTGCTTGAACCCAGAAAAGTCGGACCT
 GAAACGCCCCACGGTCTTGAGCCACCCCTATGGAGGCTCCTCCTCCACCTTCCACGCGAGAAGGA
 CAGCAGTCGTGGCAACAAGGGGCTGTGGCCACCTACCTCAGCGAGAGGGTGCAGAGCTGGGACAGGCAG
 CTAATAATGAGCAGCTCCAAGAGTCACTGCTGGACTCCCGGGCCATTTGAAAGGAAACAATCCCTACGC
 AAAATCTTACACCTTGGTAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites:

Sgfl-Mlul

ACCN:

NM_031174

Insert Size:

6042 bp

OTI Disclaimer:

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.

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](#)

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_031174.4](#), [NP_112451.1](#)

RefSeq Size:

7481 bp

RefSeq ORF:

6042 bp

Locus ID: 13508

UniProt ID: [Q9ERC8](#)

Cytogenetics: 16 57.02 cM

Gene Summary: Cell adhesion molecule that plays a role in neuronal self-avoidance. Promotes repulsion between specific neuronal processes of either the same cell or the same subtype of cells. Mediates within retinal amacrine and ganglion cell subtypes both isoneuronal self-avoidance for creating an orderly dendritic arborization and heteroneuronal self-avoidance to maintain the mosaic spacing between amacrine and ganglion cell bodies (PubMed:18216855, PubMed:19196994, PubMed:19945391). Receptor for netrin required for axon guidance independently of and in collaboration with the receptor DCC (PubMed:18585357). Might also collaborate with UNC5C in NTN1-mediated axon repulsion independently of DCC (PubMed:22685302). In spinal cord development plays a role in guiding commissural axons projection and pathfinding across the ventral midline to reach the floor plate upon ligand binding. Enhances netrin-induced phosphorylation of PAK1 and FYN. Mediates intracellular signaling by stimulating the activation of MAPK8 and MAP kinase p38. Adhesion molecule that promotes lamina-specific synaptic connections in the retina: expressed in specific subsets of interneurons and retinal ganglion cells (RGCs) and promotes synaptic connectivity via homophilic interactions (By similarity).[UniProtKB/Swiss-Prot Function]