

Product datasheet for **RG216469**

DSCAM (NM_001389) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	DSCAM (NM_001389) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	DSCAM
Synonyms:	CHD2; CHD2-42; CHD2-52
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG216469 representing NM_001389 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTGGTACTGGCTCTCTCCTTGTCCAGAGCTTCGCGAATGTTTTAGTGAAGACCTACACTCCAGCC
TCTACTTTGTCAATGCATCTCTGCAAGAGGTAGTGTGGCCAGCACCGGGACTCTGGTGCCCTGCC
CGCAGCAGGCATCCCTCTGTGACTCTCAGATGGTACCTAGCCACGGGCGAGGAGATCTACGATGTCC
GGGATCCGCCACGTCCACCCCAACGGCACTCTCCAAATTTCCCTTCCCTCCTCAAGCTTCAGTACCT
TAATCCATGATAATACTTATTATTGCACAGCTGAAAATCCTTCAGGAAAATTAGAAGTCAGGATGTCCA
CATCAAGGCTGTTTTACGGGAGCCCTATACAGTCCGTGTGGAGGACCAGAAAACCATGAGAGGCAATGTT
GCGGTCTTCAAGTGCATTATCCCTCCTCGGTGGAGGCGTACATCACTGTCTCATGGGAGAAAGACA
CTGTTTCACTTGTCTCAGGATCTAGATTTCTATCACATCCACGGGAGCCTTGTATATAAAGATGTACA
GAATGAAGATGGATTGTATAACTACCGCTGCATCACGCGGCATCGATACACCGGAGAGACGAGGCAGAGC
AACAGCGCCAGACTTTTTGTATCAGACCCAGCGAACTCAGCCCCATCCATACTGGATGGGTTTGACCATC
GCAAAGCCATGGCTGGGCAGCGTGTGGAGCTGCCTTGCAAAGCGCTCGGGCACCTGAGCCAGATTACCG
CTGGCTGAAGGACAACATGCCCTGGAATTTTCAGGGAGGTTCCAGAAGACCGTGACGGGCTGCTCATT
GAGAACATTCGCCCTCGGACTCAGGCAGCTATGTTTGTGAAGTGTCCAACAGATACGGAAGTCTAAGG
TGATAGGCCGCTGTACGTGAAACAGCCACTGAAAGCCACCATCAGTCCCAGGAAGGTTAAAAGCAGCGT
GGGTAGCCAAGTTTCTTGTCTGCAGCGTGACAGGAACTGAGGACCAGGAACTCTCTGTTACCGCAAT
GGTGAATCCTCAACCCTGGAAAAATGTGAGGATCACAGGGATCAACCAGAAAACCTTATAATGGATC
ACATGGTCAAAAGTGACGGGGCGCATACCAGTCTTTGTGCGCAAGGACAAGCTGTCCGCTCAAGACTA
TGTGCAGTGGTCTTGAAGATGGAACCTCCAAAATTTTCTGCCTTTAGTGAAAAGTGGTGAGTCCA
GCAGAGCCGTTTCCCTTATGTGCAACGTGAAGGGAACACCTTTGCCACGATCACGTGGACCCTGGACG
ATGACCCGATTCTCAAGGTGGCAGTACCAGCATCAGCCAGATGATCACGTGGAGGGGAACGTGGTCAG
CTACCTGAACATCTCAGCTCCAGGTCGGGACGGGGAGTCTACCGCTGCACTGCCAACAACTCGGC



[View online >](#)

GGAGTCGTCCTGTACCAGGCTCGAATAAACGTAAGAGGGCCTGCAAGCATTTCGACCAATGAAAAACATCA
 CAGCAATAGCAGGACGGGACACATACATTCACTGTCTGTGATTGGCTATCCGTATTACTCCATTAATG
 GTACAAGAACTCTAACCTGCTTCTTTCAACCACCGCCAAGTGGCATTGAGAACAATGGAACCTTAA
 CTTTCAGATGTGCAAAAGGAAGTGGACGAGGGGAGTACACGTGCAACGTGTTGGTTCAACCACAACTCT
 CCACCAGCCAGAGCGTCCACGTGACCGTAAAGTTCGCCCTTTCATACAACCTTTGAGTTTCAAGATT
 CTCCATTGGGCAGCGGGTCTTCATCCCTGTGTGTGGTCTCAGGGGACTTACCCATCAGCATCACCTGG
 CAGAAGGATGGCCGGCCAATCCCTGGGAGCCTGGGGTGACCATTGACAATATTGACTTCACGAGCTCCT
 TGAGGATTTCCAATCTCTCGCTCATGCACAATGGGAATTACACCTGCATAGCCCGGAATGAGGCCGCGC
 TGTGGAGCACAAAGCCAGTTGATTGTCTAGAGTTCCTCCCAAGTTTGTGGTTTCAGCCACGGGACCAGGAC
 GGGATTTATGGCAAAGCAGTCACTCTCAATTGTTCTGCTGAGGGTTACCCTGTACCTACCATCGTGTGGA
 AATTCTCTAAAGGTGCTGGGGTTCCTCAGTTCAGCCAATTGCCCTAAATGGCCGAATCCAAGTTCTCAG
 CAATGGTCTGTTGCTGATCAAGCATGTCGTGGAGGAAGACAGTGGCTACTACCTTGCAAGGTGACCAAC
 GATGTGGGCGCAGACGTGAGCAAGTCCATGTACCTCACGGTTAAAATTCCTGCGATGATAACATCCTATC
 CAAATACTACCCTGGCCACGCAGGGGCAGAAAAAGGAGATGAGCTGCACGGCGCATGGTGAAGGCCAT
 TATAGTCCGCTGGGAGAAGGAGGACCGAATCATTAAACCCTGAGATGGCCCGTTATCTTGTGTCCACCAAG
 GAGGTGGGAGAAGAGGTGATTTCTACTCTGCAGATTTTGCCAACCTGTGAGAGAAGATTCTGGTTCTTTT
 CCTGCCATGCTATTAATTCTTATGGGGAGGACCGTGAATAAATCAGCTCACAGTGAAGAGCCCCCAGA
 CCCTCCGAAATTGAGATCAAAGATGTCAAAGCACGCACAATTACGCTCAGGTGGACCATGGGGTTTGT
 GGAAACAGTCCCATCACAGGCTACGATATTGAATGCAAAAATAAATCAGACTCCTGGGATTCTGCTCAGA
 GAACCAAAGATGTTTCCCTCAGCTGAACCTCGGCCACCATCATTGATATCCACCTTCTCCACCTACAG
 CATCCGCATGTACCCAAGAACCGGATTGGCAAGAGCGAGCCAGCAACGAGCTCACCATCACGGCGGAC
 GAGGCAGCTCTGATGGTCCACCTCAGGAAGTTCACCTGGAGCTATATCATCTCAGAGCATCAGGGTCA
 CATGGAAGGCTCCAAGAAACATTTGCAAAATGGGATTATCCGTGGCTACCAAAATAGTTACCGAGAGTA
 CAGCACTGGGGTAACTTCCAATTCAACATTATCAGTGTGACACACAGCGGGGACAGTGAGGTTTACACC
 CTGGACAACCTGAATAAGTTCACCTCAGTACGGCCTGGTGGTGCAGGCCTGTAACCGGGCCGACAGGGGC
 CTTCTTCTCAGGAAATCATCACCACCACTCTCGAGGATGTGCCAGTTACCCCCCGAAAATGTCCAAGC
 CATAGCAACATCACCAGAAAGCATATCAATATCCTGGTCCACACTTTCGAAGGAAGCCTTGAATGGAATT
 CTCCAGGGGTTTCAGAGTCACTTACTGGGCCAACCTCATGGACGGAGAGCTGGGTGAGATTAACCAATCA
 CCACCACACAGCCTTCACTGGAGCTGGACGGGCTGAAAAAGTACACCAACTACAGCATCCAGGTGCTGGC
 CTTACCCGCGCAGGAGACGGGGTCAAGAGTGAGCAGATCTTACCCGGACCAAGAGGATGTTCCAGGT
 CCTCCCGGGGTGTAAGGCAGCGGGCCTCAGCCTCCATGGTCTTTGTGCTCTGGCTTCCCCCTCTCA
 AGCTGAACGGGCATCATCCGAAAGTACACTGTATTCTGCTCCACCCCTATCCACAGTGATCAGCGAGTT
 TGAGGCCTCTCCCGACTCGTTTTCTACAGAATCCCAACCTGAGTAGGAATCGTCAGTACAGCGTCTGG
 GTGGTGGCTGTTACTTACGCCGGAAGAGGCAACAGCAGTGAATCATCACAGTTCGAGCCACTAGCAAAAAG
 CTCCTGCACGAATCCTGACCTTCACTGGGACAGTGACTACTCCATGGATGAAAGACATTGTCTTGCTTG
 TAAGGCTGTTGGGGACCTTCTCCTGCAGTCAAATGGATGAAAGACAGTAACGGGACACCCAGTCTAGTA
 ACGATTGATGGGCGGAGGAGCATCTTTAGCAACGGAAGCTTCAATTCGCACGGTGAAGCAGAAGACT
 CCGGCTATTACAGCTGCATTGCCAATAACAACCTGGGATCTGATGAAATATTTTTAACTTACAAGTACA
 AGTCCACCAGATCAGCCTCGGTTACAGTCTCCAAGACCAGTCTTCCATCACCTTCTTGGCTC
 CCTGGAGACAACGGGGCAGCTCTATCAGAGGATACATACTGCAGTACTCCGAGGACAATAGTGAGCAGT
 GGGGGAGTTTTCCAATCAGCCCCAGCGAACGTTCTATCGCTTGAAAAATCTCAAATGTGGGACTTGGA
 TAAGTTACACTGACAGCCAAAATGGAGTGGGCCAGGGCGCATAAGTGAATCATAGAAGCAAAGACC
 TTAGGAAAAGAGCCCAAGTTCTCAAAGGAGCAGGAGCTGTTTGCCAGCATCAACACCACACGCGTGAGGC
 TGAACCTCATTGGCTGGAATGATGGCGGTGCCCATCACCTCCTTCACTAGAGTACAGGCCCTTTGG
 GACCACAGTTTGGACCACAGCTCAGAGGACCTCTCTCCAAGTCTACATCCTGTATGACCTGCAGGAA
 GCCACCTGGTATGAGCTGCAGATGCGGGTGTGCAACAGTGCAGGGTGCAGGAGGAGGAGGAGGAGGCT
 CTACGCTGAACACTACGATGGCAGTACAATCCTCCACTCATTAAAGTCAAGTGTCCAAAACGAAGAAGGGCT
 GACGACCAACGAGGGGCTCAAGATGCTGGTGACCATCTCCTGTATCCTGGTGGGGTCTTGTGCTGTTT
 GTGCTCCTGCTGGTTGTGCGGAGGAGGGCGGGAGCAGAGGCTAAAGAGGCTGCGAGATGCAAAGAGTT
 TAGCTGAAATGCTCATGAGTAAGAATACCCGGACTTCAGATACGTTAAGCAAGCAACAGCAGACCCTGCG
 AATGCACATCGACATACCCAGGGCTCAGCTTTTGATTGAAGAGAGAGACAGGATGGAGACCATTGATGAT
 CGCTCCACGGTTCTGTTGACGGATGCTGACTTTGGAGAGGCAGCTAAGCAGAAGTCCCTGACGGTCACTC

ACACGGTCCATTACCAATCGGTGTCTCAGGCCACTGGGCCCTTAGTGGATGTTTCAGACGCTCGGCCGGG
AACGAATCCCACCACCAGGAGGAATGCCAAGGCTGGGCCACAGCGAGAAACCGCTATGCCAGCCAGTGG
ACCCTCAACCGACCCACCCACCATCTCAGCACACCCCTACCACAGACTGGAGGCTGCCAACACCCA
GGGCTGCAGGATCAGTAGACAAAGAGAGCGACAGTTACAGCGTCAGCCCCTCGAAGACACAGATCGAGC
AAGAAGCAGCATGGTCTCCACAGAAAGTGCCTCCTCCACTACGAAGAACTGGCCAGGGCCTACGAACAC
GCCAAGATGGAAGAGCAACTGAGGCACGCCAAGTTCACCATCACGGAGTGCTTCATATCAGACACGTCAT
CGGAGCAGTTGACGGCAGGGACAATAGTACACCGACAGTCTGACCTCCAGCACCCCTCCGAATCGGG
AATCTGCAGGTTCACTGCATCTCCCCCAAACCTCAGGATGGAGGAAGAGTAATGAATATGGCAGTTCCA
AAGGCACATCGGCCAGGTGACCTCATACTTGCCTCCATACCTTAGAATGGACTTTTTGTAAACCGAG
GTGGTCCAGGCACCAGCAGGGACCTGAGCTTAGGACAAGCATGCTTGAACCTCAGAAAAGCCGGACCT
GAAGCGCCCCACGGTCTGGAGCCATCCCGATGGAAGCCGCTCCTCCGCTCCTCCACGAGAGAAGGA
CAGTCGTGGCAGCCGGGGCCGTGGCCACATTACCTCAGCGGGAGGGAGCAGAGCTGGGACAGGCAGCTA
AAATGAGCAGCTCCAAGAATCACTGCTCGACTCCCGGGCCATTGAAAGGAAACAATCCTTACGCAA
ATCTTACACCCTGGTA

AGCGGACCGACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG216469 representing NM_001389
Red=Cloning site Green=Tags(s)

MWILALSLFQSFANVFSEDLHSSLYFVNASLQEVVFASTTGTLVPCPAAGIPPVTLRWYLATGEEIYDVP
GIRHVHPNGTLQIFPPSSSFSTLIHDNTYYCTAENPSGKIRSQDVHIKAVLREPYTVRVEDQKTMGRNV
AVFKCIIPSSVEAYITVVSWEKDTVSLVSGSRFLITSTGALYIKDVQNEGLYNYRCITRHYRTGETRQS
NSARLFVSDPANSAPSILDGFDHRKAMAGORVELPCKALGHPEPDYRWLKDNPMLLESGRFQKTVTGLLI
ENIRPSDSGSYVCEVSNRYGTAKVIGRLYVKQPLKATISPRKVKSSVGSQVLSVSVTGTEDQELSWYRN
GEILNPGKNVITGINHENLIMDHMVKSDGGAYQCFVRKDKLSAQDYVQVLEDTGPKIISAFSEKVVSP
AEPVSLMCNVKGTPLPTITWTLDDDPILKGGSHRISQMITSEGNVSYLNISSSQVDRGGVYRCTANNSA
GVVLYQARINVRGPASIRPMKNITAIAGRDTYIHRVIGYPPYYSIKWYKNSNLLPFNHRQVAFENNGTLK
LSDVQKEVDEGEYTCNVLVQPQLSTSQSVHVTVKVPPFIQPFEPFRFSIGQRFVPCVVVSGDLPTITW
QKDGRIIPGSLGVTIDNIDFTSSLRISNLSLMHNGNYTCIARNEAAVEHQSQLIVRVPPKFFVQPRDQD
GIYGKAVILNCSAEGYPVPTIVWKFSGGAGVPQFQPIALNGRIQVLSNGSLLIKHVVEEDSGYLLCKVSN
DVGADVSKSMYLVKIPAMITSYPNTTLATQGGKEMSCSTAHGEKPIIVRWEKEDRIINPEMARYLVSTK
EVGEEVISTLQILPTVREDSGFFSCHAINSYGEDRGIIQLTVQEPDPPEIEIKDVKARTITLRWTMGFD
GNSPITGYDIECKNKSDSWSAQRKDVSPQLNSATIIDIHPSSTYSIRMYAKNRIGKSEPSNELTITAD
EAAPDPPPQEVHLEPISSQSIRVTWKAPKKHLQNGIIRGYQIGYREYSTGGNFQFNIISVDTSGDSEVYT
LDNLNKFQYGLVVQACNRAGTGPSSQEIITTTLEDVPSYPPENVQAIATSPESISISWSTLSKEALNGI
LQGRFVIYWANLMDGELGEIKNITTTQPSLELDGLEKYTNYSIQVLAFTAGDGRVSEQIFTRTKEDVPG
PPAGVKAASASAMVFSWLPLKLNGIIRKYTVFCSHPYPTVISEFEASPDSFSYRIPNLSRNRQYSVW
VVAVTSAGRGNSEIITVEPLAKAPARILTFSGTVTPWPKDIVLPCKAVGDPSPAVKWMKDSNGTPSLV
TIDGRRSIFSNGSFIIRTVKAEDSGYYSIANNWGSDEIILNLQVQVPPDQPRLTVSKTSSSITLSWL
PGDNGGSSIRGYILQYSEDNSEQWGSFPIPSERSYRLENLKCCTWYKFTLTAQNGVGPRISEIEAKT
LGKEPQFSKEQELFASINTTRVRLNLIQWNDGGCPISTFLEYRPFGTTVWTTAQRSTLSKSYILYDLQE
ATWYELQMRVCNSAGCAEKQANFATLNYDGGSTIPPLIKSVVQNEEGLTNEGLKMLVTISICILVGVLFF
VLLL VVRRRRRREQLRKL RDAKSLAEMLSKNTRTSDTL SKQQQLRMHIDIPRAQLLIEERDTMETIDD
RSTVLL TDADFGEAAKQKSL TVHTVHYQSVSQATGPLVDVSDARPGTNPTRR NAKAGPTARNRYASQW
TLNRPHPTISAHTLTTDWRLPTPRAAGSVDKESDSYSVSPSQDTRARSSMVSTESASSTYEELARAYEH
AKMEEQLRHAKFTITECFISDTSSEQLTAGTNEYTDSLTSSTPSESGICRF TASP PKPQDGRVMNMAVP
KAHRPGDLIHLPPYL RMDFLNRRGGPGTSRDL SLGQACLEPQKSRTLKRPTVLEPIPME AASSASSTREG
QSWQP GAVATLPQREGAELGQAAMSSSQESLLDSRGLKGNPNYAKSYTLV

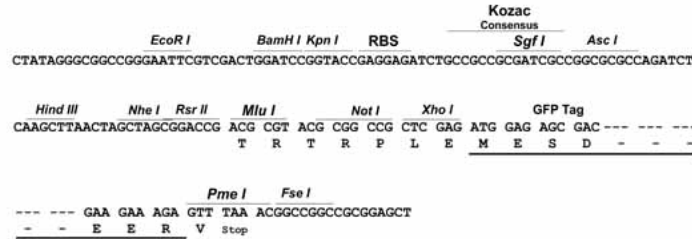
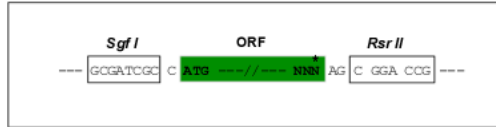
SGPTRRRLE – GFP Tag – V

Restriction Sites:

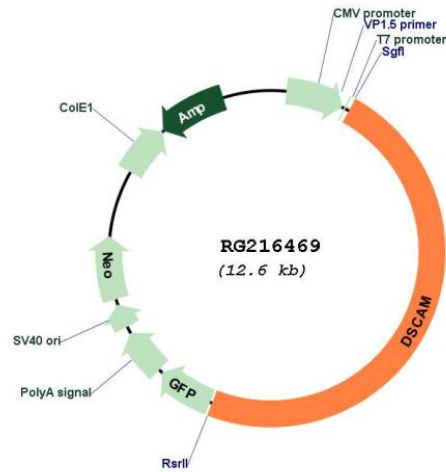
Sgfl-RsrII

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:



ACCN: NM_001389

ORF Size: 6036 bp

OTI Disclaimer: 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](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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_001389.5</u>
RefSeq Size:	7110 bp
RefSeq ORF:	6039 bp
Locus ID:	1826
UniProt ID:	<u>O60469</u>
Cytogenetics:	21q22.2
Protein Families:	Transmembrane
Gene Summary:	This gene is a member of the immunoglobulin superfamily of cell adhesion molecules (Ig-CAMs), and is involved in human central and peripheral nervous system development. This gene is a candidate for Down syndrome and congenital heart disease (DSCHD). A gene encoding a similar Ig-CAM protein is located on chromosome 11. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. [provided by RefSeq, Oct 2012]