

## Product datasheet for **RG232980**

### CD166 (ALCAM) (NM\_001243280) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	CD166 (ALCAM) (NM_001243280) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	CD166
Synonyms:	CD166; MEMD
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG232980 representing NM\_001243280.  
 Blue=ORF Red=Cloning site Green=Tag(s)

```
GCTCGTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTGACTG
GATCCGGTACCGAGGAGATCTGCCGCCCGCATCGCC
ATGGAATCCAAGGGGGCCAGTTCCTGCCGTCTGCTCTTCTGCCTCTTGATCTCCGCCACCGTCTTCAGG
CCAGGCCTTGGATGGTATACTGTAAATTCAGCATATGGAGATACCATTATCATACCTTCCGACTTGAC
GTACCTCAGAATCTCATGTTTGGCAAATGGAAATATGAAAAGCCCGATGGCTCCCCAGTATTTATTGCC
TTCAGATCCTCTACAAAGAAAAGTGTGCAGTACGACGATGTACCAGAATACAAAGACAGATTGAACCTC
TCAGAAAACACTACTTTGTCTATCAGTAATGCAAGGATCAGTGATGAAAAGAGATTTGTGTGCATGCTA
GTAAGTGAAGGACAACGTGTTTGGAGCACCTACAATAGTCAAGGTGTTCAAGCAACCATCTAAACCTGAA
ATTGTAAGCAAAGCACTGTTTCTCGAAACAGAGCAGCTAAAAAAGTTGGGTGACTGCATTTTCAGAAGAC
AGTTATCCAGATGGCAATATCACATGGTACAGGAATGGAAAAGTGTACATCCCCTTGAAGGAGCGGTG
GTCATAATTTTTAAAAAGAAAATGGACCCAGTACTCAGCTCTATACCATGACTCCACCCTGGAGTAC
AAGACAACCAAGGCTGACATACAATGCCATTCACCTGCTCGGTGACATATTATGGACCATCTGGCCAG
AAAAAATTCATTCTGAACAGGCAGTATTTGATATTTACTATCCTACAGAGCAGGTGACAATACAAGTG
CTGCCACCAAAAAATGCCATCAAAGAAGGGGATAACATCACTCTTAAATGCTTAGGGAATGGCAACCTC
CCCCAGAGGAATTTTTGTTTTACTTACCAGGACAGCCCGAAGGAATAAGAAGCTCAAACTACTTACACA
CTGACGGATGTGAGGCGCAATGCAACAGGAGACTACAAGTGTTCCTGATAGACAAAAAAGCATGATT
GCTTCAACAGCCATCACAGTTCACTATTTGGATTTGTCCTTAAACCAAGTGGAGAAGTGACTAGACAG
ATTGGTGTGACCTACCCGTGTCATGCACAATATCTGCTAGCAGGAATGCAACTGTGGTATGGATGAAA
GATAACATCAGGCTTCGATCTAGCCCGTCATTTCTAGTCTTCATTATCAGGATGCTGAAAACATATGTC
TGCGAAACTGCTCTGACGAGGTTGAAGGACTAAAGAAAAGAGAGTCTTACTGCTCATTGTGAGAAGGC
AAACCTCAAATAAAAAATGACAAAAGAAAACCTGATCCAGTGGACTATCTAAAACAATAATCTGCCATGTG
GAAGGTTTTCAAAGCCAGCCATTCAATGGACAATTACTGGCAGTGAAGCGTCATAAACCAAAACAGAG
GAATCTCCTTATATTAATGGCAGGTATTATAGTAAAATTATCATTCCCCTGAAGAGAATGTTACATTA
ACTTGCACAGCAGAAAACCAACTGGAGAGAACAGTAAACTCCTTGAATGTCTCTGCTAATGAAAACAGA
GAAAAGGTGAATGACCAGGCAAACTAATTGTGGGAATCGTTGTTGGTCTCCTCCTTGTGCCCTTGT
GCTGGTGTGCTACTGGCTGTACATGAAGAAGTCAAAGACTGCATCAAAACATGTAACAAGGACCTC
GGTAATATGGAAGAAAACAAAAGTTAGAAGAAAACAATCACAAAACCTGAAGCC
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
```

**Protein Sequence:**

>Peptide sequence encoded by RG232980  
 Blue=ORF Red=Cloning site Green=Tag(s)

```
MESKGASSRLLFCLLISATVFRPGLGWYTVNSAYGDTIIPCRLDVPQNL MFGKWKYKPDGSPVFIA
FRSSTKKSQYDDVPEYKDRNLNLSENYTLSISNARISDEKRFVCMVLEDNVFEAPTIVKVKQPSKPE
IVSKALFLETEQLKKGDCISEDSYDPGNITWYRNGKVLHPLEGAVVIFKEMDPVTQLYTMTSTLEY
KTTKADIQMPFTCSVTYYGPGSQKTIHSEQAVFDIYYPTQVTIQVLPKNAIKEGDNITLKLGNLGNP
PPEEFLFYLPQPEGIRSSNTYTLTDVRRNATGDYKCSLIDKKSMIASTAITVHYLDLNLNPSGEVTRQ
IGDALPVSCTISASRNATVWMDNIRLRSSPSFSSLHYQDAGNYVCETALQEVEGLKKRESLTLIVEG
KPQIKMTKKTDPSTLTKTIIHVEGFPKPAIQWTITGSGSVINQTEESPYINGRYSKIIISPEENVTL
TCTAENQLERTVNSLVNSANENREKVNDQAKLIVGIVVGLLLAALVAGVVYWL YMKKSKTASHVKNKL
GNMEENKLEENHKTEA
TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGEGTPEQGRMTNKMKSTKGALTFSPYLLSHV
MGYGFYHFGTYPSGYENPFLHAINNGGYNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPE
SVIFTDKIIIRSNAIVEHLHPMGDNDLDGSFTRTFLRDGGYSSVVDSHMHFKSAIHPSILQNGGPMFA
FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV
```

**Restriction Sites:**

SgfI-MluI

**Cloning Scheme:**


**ACCN:** NM\_001243280

**ORF Size:** 1710 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:**

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\\_001243280.1](#), [NP\\_001230209.1](#)

**RefSeq Size:** 4884 bp

**RefSeq ORF:** 1713 bp

**Locus ID:** 214

**UniProt ID:** [Q13740](#)

**Cytogenetics:** 3q13.11

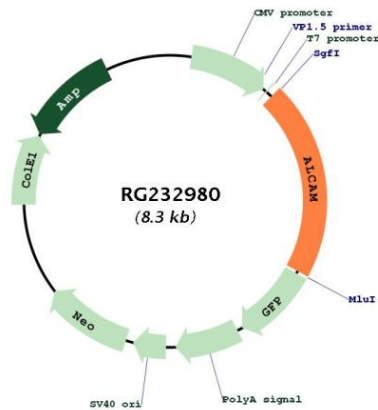
**Protein Families:** Druggable Genome, ES Cell Differentiation/IPS, Transmembrane

**Protein Pathways:** Cell adhesion molecules (CAMs)

**MW:** 63.7 kDa

**Gene Summary:** This gene encodes activated leukocyte cell adhesion molecule (ALCAM), also known as CD166 (cluster of differentiation 166), which is a member of a subfamily of immunoglobulin receptors with five immunoglobulin-like domains (VVC2C2C2) in the extracellular domain. This protein binds to T-cell differentiation antigene CD6, and is implicated in the processes of cell adhesion and migration. Multiple alternatively spliced transcript variants encoding different isoforms have been found. [provided by RefSeq, Aug 2011]

**Product images:**



Circular map for RG232980