

## Product datasheet for **RG208400**

### CD239 (BCAM) (NM\_005581) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	CD239
Synonyms:	AU; CD239; LU; MSK19
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



**ORF Nucleotide Sequence:** >RG208400 representing NM\_005581  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTACTATAGGGCGCCGGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCGCGATCGCC

ATGGAGCCCCGGACGCACCGGCCAGGCGCGGGGCCCGGGCTGCTGTTGCTCGCAGTCTGCTGG  
 CGGCGCACCCAGATGCCAGGCGGAGGTGCGCTTGTCTGTACCCCGCTGGTGGAGGTGATGCGAGGAAA  
 GTCTGTCTATTCTGGACTGCACCCCTACGGGAACCCACGACCATTATATGCTGGAATGGTTTCCTTACCGAC  
 CGCTCGGGAGCTCGCCCCCGCTAGCTCGGCTGAGATGCAGGGCTCTGAGCTCCAGGTACAATGCACG  
 ACACCCGGGGCCGAGTCCCCATACCAGCTGGACTCCAGGGGCGCTGGTCTGGCTGAGGCCAGGT  
 GGGCGACGAGCGAGACTACGTGTGCTGGTGGAGGCGAGGGCGGACGCACTGCTGAGGCCACTGCGCGG  
 CTCAACGTGTTTGCAAAGCCAGAGGCCACTGAGGTCTCCCCAACAAGGGACTGCTGTGATGGAGG  
 ACTCTGCCAGGAGATCGCCACCTGCAACAGCCGGAACGGGAACCCGGCCCCAAGATCACGTGGTATCG  
 CAACGGGCAGCGCTGGAGGTGCCGTAGAGATGAACCCAGAGGGCTACATGACCAGCCGACGGTCCGG  
 GAGGCCTCGGGCTGCTCTCCCTACCCAGCACCTCTACCTGCGGCTCCGCAAGGATGACCAGAGCCCA  
 GCTTCCACTGCGCCGCCACTACAGCTGCCCCAGGGCCGACCGCCGCTGGACAGCCCCACCTTCCA  
 CCTCACCTGCACTATCCCACGGAGCAGTGCAGTTCTGGGTGGGACGCCCGTCCACCCAGCAGGCTGG  
 GTACGCGAGGGTGACACTGTCCAGCTGCTGCGGGGGACGGCAGCCCCAGCCGGAGTATACGCTTT  
 TCCGCTTCAGGATGAGCAGGAGGAAGTGTGAATGTGAATCTCGAGGGGAATTGACCCTGGAGGGAGT  
 GACCCGGGGCCAGAGCGGGACCTATGGCTGCAGAGTGGAGGATTACGACGCGGAGATGACGTGCAGCTC  
 TCCAAGACGCTGGAGTGCAGTGGCTATCTGGACCCCTGGAGCTCAGCGAGGGGAAGGTGCTTTCCT  
 TACCTCTAAACAGCAGTGCAGTCGTGAAGTCTCCGTGCACGGCTGCCACCCCTGCCCTACGCTGGAC  
 CAAGGACTCCACTCCCCTGGGCGATGGCCCATGCTGTGCTCAGTTCTATCACCTTCGATTCCAATGGC  
 ACCTACGTATGTGAGGCCTCCCTGCCACAGTCCCGTCTCAGCCGACCCAGAATTACGCTGCTGG  
 TCCAAGGCTCGCCAGAGCTAAAGACAGCGGAAATAGAGCCCAAGGCAGATGGCAGCTGGAGGGAAGGAGA  
 CGAAGTCACACTCATCTGCTCTGCCCGGGCCATCCAGACCCAACTCAGTGGAGCCAATTGGGGGGC  
 AGCCCCGACAGCCAATCCCCGGACGGGTTGGGTGAGCAGCTCTCTGACCCTGAAAGTGACCAGCG  
 CCCTGAGCCGCGATGGCATCTCTGTGAAGCTCCAACCCCAAGGGAACAAGCCCATGTCTTCACTT  
 CGGCACCGTGGCCCCAGACCTCCAGGCTGGAGTGGCCGTATGGCCGTGGCCGTGAGCGTGGCCCTC  
 CTGCTCCTCGTCTGTCTTCTACTGCTGAGACGCAAGGGGGCCCTGCTGCCGCCAGCGGGGG  
 AGAAGGGGGCTCCGCCGACGGGAGCCAGGGCTGAGCCACTCGGGGTGAGGCAACCAAGAGCAGACCGG  
 CCTTCTCATGGGAGGTGCTCCGGAGGAGCCAGGGGTGGCAGCGGGGGCTTCGGAGACGAGTGC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG208400 representing NM\_005581  
 Red=Cloning site Green=Tags(s)

MEPPDAPAQARGAPRLLLLAVLLAAHPDAQAEVRLSVPPLVEVMRGKSVILDCPTPTGTHDHMLEWFLTD  
 RSGARPLASAEMQSELQVTMHDTRGRSPYQLDSQRLVLAEAQVGDERTDYVCVVRAGAAGTAEATAR  
 LNVFAKPEATEVSPNKGTLVSMEDSAQEIATCNSRNGNPAPKITWYRNGQRLEVPVEMNPEGYMTSRTVR  
 EASGLLSLTSTLYLRLRKKDDRDASFHCAHYSLPEGRHGRLDSPTFHLTLHYPTEHVQFVWVWVSPSTPAGW  
 VREGDVTQQLCRGDGSPSPEYTLFRLQDEQEEVLNVNLEGNLTLEGVTRGQSGTYGCRVEDYDAADDVQL  
 SKTLELRVAYLDPLELSEGKVLSLPLNSSAVVNCVHGLPTPALRWTKDSTPLGDGPMLSLSSITFDSNG  
 TYVCEASLPTVPVLSRTQNFTLLVQGSPELKTAIEIPKADGSWREGDEVTLICSARGHPDKLSWSQLGG  
 SPAEPIPGRQGWSSSLTLKVTLSALSRDGISSASNPNGNKRHFVHFGTVSPQTSQAGVAVMAVAVSVGL  
 LLLVVAVFYCYRRKGGPCCRQRREKAPPPEPGLSHSGSEQPEQTGLLMGGASGGARGGSGGFGDECE

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

## Cloning Scheme:



**ACCN:** NM\_005581

**ORF Size:** 1884 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.

**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

**RefSeq:** [NM\\_005581.5](#)

RefSeq Size: 2448 bp

RefSeq ORF: 1887 bp

Locus ID: 4059

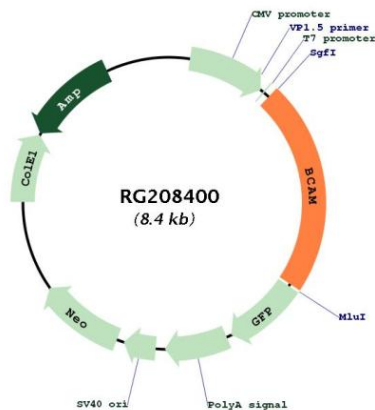
UniProt ID: [P50895](#)

Cytogenetics: 19q13.32

Protein Families: Druggable Genome, Transmembrane

**Gene Summary:** This gene encodes Lutheran blood group glycoprotein, a member of the immunoglobulin superfamily and a receptor for the extracellular matrix protein, laminin. The protein contains five extracellular immunoglobulin domains, a single transmembrane domain, and a short C-terminal cytoplasmic tail. This protein may play a role in epithelial cell cancer and in vaso-occlusion of red blood cells in sickle cell disease. Polymorphisms in this gene define some of the antigens in the Lutheran system and also the Auberger system. Inactivating variants of this gene result in the recessive Lutheran null phenotype, Lu(a-b-), of the Lutheran blood group. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, May 2012]

### Product images:



Circular map for RG208400