

Product datasheet for RC230069

CEACAM1 (NM_001184813) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: CEACAM1 (NM_001184813) Human Tagged ORF Clone

Tag: Myc-DDK
Symbol: CEACAM1

Synonyms: BGP; BGP1; BGP1

Mammalian Cell Neomycin

Selection:

Vector: pCMV6-Entry (PS100001)

E. coli Selection: Kanamycin (25 ug/mL)

OriGene Technologies, Inc.

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CEACAM1 (NM_001184813) Human Tagged ORF Clone - RC230069

ORF Nucleotide Sequence:

>RC230069 representing NM_001184813
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC

ATGGGGCACCTCTCAGCCCCACTTCACAGAGTGCGTGTACCCTGGCAGGGGCTTCTGCTCACAGCCTCAC TTCTAACCTTCTGGAACCCGCCCACCACTGCCCAGCTCACTACTGAATCCATGCCATTCAATGTTGCAGA GGGGAAGGAGGTTCTTCTCCTTGTCCACAATCTGCCCCAGCAACTTTTTGGCTACAGCTGGTACAAAGGG GAAAGAGTGGATGGCAACCGTCAAATTGTAGGATATGCAATAGGAACTCAACAAGCTACCCCAGGGCCCG CAAACAGCGGTCGAGAGACAATATACCCCAATGCATCCCTGCTGATCCAGAACGTCACCCAGAATGACAC TACCCGGAGCTGCCCAAGCCCTCCATCTCCAGCAACACTCCAACCCTGTGGAGGACAAGGATGCTGTGG CAGTCCCAGGCTGCCAATGGCAACAGGACCCTCACTCTACTCAGTGTCACAAGGAATGACACA GGACCCTATGAGTGTGAAATACAGAACCCAGTGAGTGCGAACCGCAGTGACCCAGTCACCTTGAATGTCA CCTATGGCCCGGACACCCCCACCATTTCCCCTTCAGACACCTATTACCGTCCAGGGGCAAACCTCAGCCT CTCCTGCTATGCAGCCTCTAACCCACCTGCACAGTACTCCTGGCTTATCAATGGAACATTCCAGCAAAGC ACACAAGAGCTCTTTATCCCTAACATCACTGTGAATAATAGTGGATCCTATACCTGCCACGCCAATAACT CAGTCACTGGCTGCAACAGGACCACAGTCAAGACGATCATAGTCACTGATAATGCTCTACCACAAGAAAA TGGCCTCTCACCTGGGGCCATTGCTGGCATTGTGATTGGAGTAGTGGCCCTGGTTGCTCTGATAGCAGTA GCCCTGGCATGTTTTCTGCATTTCGGGAAGACCGGCAGGGCAAGCGACCAGCGTGATCTCACAGAGCACA GAAATAATTTATTCAGAAGTAAAAAAGCAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC230069 representing NM_001184813 Red=Cloning site Green=Tags(s)

MGHLSAPLHRVRVPWQGLLLTASLLTFWNPPTTAQLTTESMPFNVAEGKEVLLLVHNLPQQLFGYSWYKG ERVDGNRQIVGYAIGTQQATPGPANSGRETIYPNASLLIQNVTQNDTGFYTLQVIKSDLVNEEATGQFHV YPELPKPSISSNNSNPVEDKDAVAFTCEPETQDTTYLWWINNQSLPVSPRLQLSNGNRTLTLLSVTRNDT GPYECEIQNPVSANRSDPVTLNVTYGPDTPTISPSDTYYRPGANLSLSCYAASNPPAQYSWLINGTFQQS TQELFIPNITVNNSGSYTCHANNSVTGCNRTTVKTIIVTDNALPQENGLSPGAIAGIVIGVVALVALIAV ALACFLHFGKTGRASDQRDLTEHKPSVSNHTQDHSNDPPNKMNEVTYSTLNFEAQQPTQPTSASPSLTAT

EIIYSEVKKQ

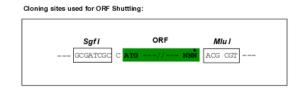
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

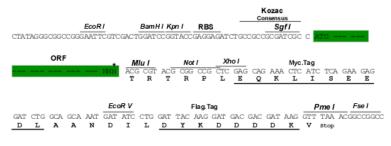
Chromatograms: https://cdn.origene.com/chromatograms/mk8059 c12.zip

Restriction Sites: Sgfl-Mlul



Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

ACCN: NM_001184813

ORF Size: 1290 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 customport@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. <u>More info</u>

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.



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

0.22um filter is required.

RefSeq: <u>NM 001184813.2</u>

RefSeq ORF: 1293 bp Locus ID: 634

UniProt ID: P13688

Cytogenetics: 19q13.2

Protein Families: Druggable Genome, Transmembrane

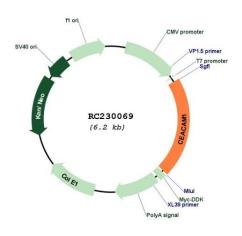
MW: 47.4 kDa

Product images:

Gene Summary: This gene encodes a member of the carcinoembryonic antigen (CEA) gene family, which

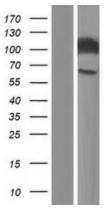
belongs to the immunoglobulin superfamily. Two subgroups of the CEA family, the CEA cell adhesion molecules and the pregnancy-specific glycoproteins, are located within a 1.2 Mb cluster on the long arm of chromosome 19. Eleven pseudogenes of the CEA cell adhesion molecule subgroup are also found in the cluster. The encoded protein was originally described in bile ducts of liver as biliary glycoprotein. Subsequently, it was found to be a cell-cell adhesion molecule detected on leukocytes, epithelia, and endothelia. The encoded protein mediates cell adhesion via homophilic as well as heterophilic binding to other proteins of the subgroup. Multiple cellular activities have been attributed to the encoded protein, including roles in the differentiation and arrangement of tissue three-dimensional structure, angiogenesis, apoptosis, tumor suppression, metastasis, and the modulation of innate and adaptive immune responses. Multiple transcript variants encoding different isoforms have been reported, but the full-length nature of all variants has not been defined.

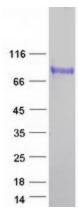
[provided by RefSeq, May 2010]



Circular map for RC230069







Western blot validation of overexpression lysate (Cat# [LY433069]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC230069 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).

Coomassie blue staining of purified CEACAM1 protein (Cat# [TP330069]). The protein was produced from HEK293T cells transfected with CEACAM1 cDNA clone (Cat# RC230069) using MegaTran 2.0 (Cat# [TT210002]).