

# **Product datasheet for SC302309**

## CEACAM1 (NM\_001024912) Human Untagged Clone

### **Product data:**

**Product Type:** Expression Plasmids

**Product Name:** CEACAM1 (NM\_001024912) Human Untagged Clone

Tag: Tag Free
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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**Fully Sequenced ORF:** 

>SC302309 representing NM\_001024912.

Blue=Insert sequence Red=Cloning site Green=Tag(s)

GCTCGTTTAGTGAACCGTCAGAATTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGGATCGCC

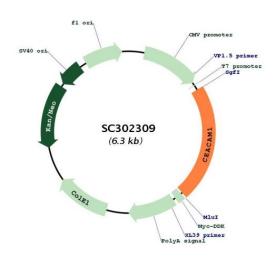
ATGGGGCACCTCTCAGCCCCACTTCACAGAGTGCGTGTACCCTGGCAGGGGCTTCTGCTCACAGCCTCA CTTCTAACCTTCTGGAACCCGCCCACCACTGCCCAGCTCACTGCAATCCATGCCATTCAATGTTGCA GAGGGGAAGGAGGTTCTTCTCCTTGTCCACAATCTGCCCCAGCAACTTTTTGGCTACAGCTGGTACAAA GGGGAAAGAGTGGATGGCAACCGTCAAATTGTAGGATATGCAATAGGAACTCAACAAGCTACCCCAGGG CCCGCAAACAGCGGTCGAGAGACAATATACCCCAATGCATCCCTGCTGATCCAGAACGTCACCCAGAAT CATGTATACCCGGAGCTGCCCAAGCCCTCCATCTCCAGCAACACTCCAACCCTGTGGAGGACAAGGAT CTCCCGGTCAGTCCCAGGCTGCCAGCTGTCCAATGGCAACAGGACCCTCACTCTACTCAGTGTCACAAGG TTGAATGTCACCTATGGCCCGGACACCCCCACCATTTCCCCTTCAGACACCTATTACCGTCCAGGGGCA AACCTCAGCCTCTCCTGCTATGCAGCCTCTAACCCACCTGCACAGTACTCCTGGCTTATCAATGGAACA TTCCAGCAAAGCACACAAGAGCTCTTTATCCCTAACATCACTGTGAATAATAGTGGATCCTATACCTGC CACGCCAATAACTCAGTCACTGGCTGCAACAGGACCACAGTCAAGACGATCATAGTCACTGAGCTAAGT CCAGTAGTAGCAAAGCCCCAAATCAAAGCCAGCAAGACCACAGTCACAGGAGATAAGGACTCTGTGAAC CTGACCTGCTCCACAAATGACACTGGAATCTCCATCCGTTGGTTCTTCAAAAACCAGAGTCTCCCGTCC GGGACGTATTGGTGTGAGGTCTTCAACCCAATCAGTAAGAACCAAAGCGACCCCATCATGCTGAACGTA AACTATAATGCTCTACCACAAGAAAATGGCCTCTCACCTGGGGCCATTGCTGGCATTGTGATTGGAGTA GTGGCCCTGGTTGCTCTGATAGCAGTAGCCCTGGCATGTTTTCTGCATTTCGGGAAGACCGGCAGCTCA **GGACCACTCCAATGA** 

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC

**Restriction Sites:** 

Plasmid Map:

Sgfl-Mlul



**ACCN:** NM\_001024912

**Insert Size:** 1395 bp



#### CEACAM1 (NM\_001024912) Human Untagged Clone - SC302309

**OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a

point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning

into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

**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:** <u>NM 001024912.2</u>

RefSeq Size: 3475 bp
RefSeq ORF: 1395 bp
Locus ID: 634

 UniProt ID:
 P13688

 Cytogenetics:
 19q13.2

**Protein Families:** Druggable Genome, Transmembrane

**MW:** 50.5 kDa



#### **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]

Transcript Variant: This variant (2) lacks an exon in the 3' coding region that results in a frameshift and an early stop codon, compared to variant 1. The resulting protein (isoform 2) has a distinct C-terminus and is shorter than isoform 1. This variant has been referred to by multiple names, including BGPc, transmembrane carcinoembryonic antigen 3, TM3-CEA, and CEACAM1-4S. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.