

Product datasheet for **AP26025PU-N**

CEACAM1 (N-term) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	ELISA, FC, WB
Recommended Dilution:	Western blot: 1-5 µg/ml. ELISA: 1-5 µg/ml. FACS: 2-20 µg/ml.
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Highly pure recombinant Human soluble CEACAM-1 (N-term)
Specificity:	This antibody will detect recombinant Human soluble CEACAM-1. It shows cross-reactivity with several other CEACAM family members. There is no cross-reactivity with Human CEACAM-8.
Formulation:	PBS pH 7.4 State: Aff - Purified State: Lyophilized purified IgG fraction Preservative: None
Reconstitution Method:	Restore in sterile water to a concentration of 0.1-1.0 mg/ml.
Purification:	Protein A Affinity Chromatography
Conjugation:	Unconjugated
Storage:	Prior to reconstitution store at 2-8°C. Following reconstitution store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	carcinoembryonic antigen related cell adhesion molecule 1
Database Link:	Entrez Gene 634 Human P13688



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Background:

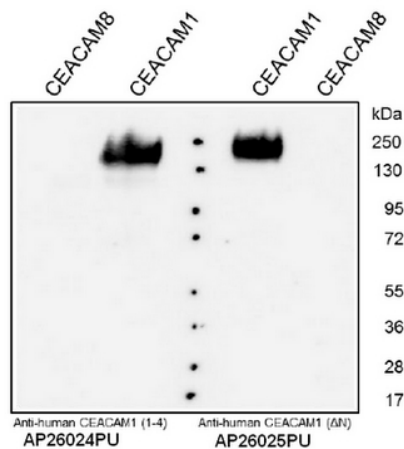
Carcinoembryonic antigen (CEA)-related cell adhesion molecule 1 (CEACAM1; also BGP) is a 160 kDa member of the CEACAM branch of the CEA gene family of the immunoglobulin superfamily (1-3). It is one of seven human CEACAM subfamily genes that are essentially divided equally between type I trans-membrane proteins (CEACAM1, 3-4) and GPI-linked molecules (CEACAM5-8). There is no CEACAM2 in human. The gene for human CEACAM1 codes for a 526 amino acid (aa) type I transmembrane protein that contains a 34 aa signal sequence, a 394 aa extracellular domain (ECD), a 24 aa transmembrane segment, and a 74aa cytoplasmic region (4, 5). The ECD contains one N-terminal V-type followed by three C2-type Ig-like domains. It shows considerable glycosylation (1). The cytoplasmic region shows one ITIM motif and a calmodulin binding site (1-3). There are three soluble and seven transmembrane isoforms, with variations occurring in both the ECD and cytoplasmic region. All ten alternate splice forms contain the V-type Ig-like domain (aa's 35-142). The three soluble forms also contain the first two C2-type Ig like domains (aa's 145-317), with differences coming in the third C2-type Ig-like domain (6). The seven transmembrane isoforms are highly divergent. Full-length mouse and rat CEACAM1 are approximately 57% aa identical to human CEACAM1; in the V-type Ig-like domain, they are 58% and 56% aa identical, respectively. The full-length molecule is found on neutrophils, bile duct epithelium, activated NK cells, colonic columnar epithelium and endothelium.

Synonyms:

BGP, BGP1, Biliary glycoprotein 1

Protein Families:

Druggable Genome, Transmembrane

Product images:


Western Analysis with anti-Human CEACAM1. Both antibodies recognize CEACAM1 but not CEACAM8. Cross reaction with CEACAM3, CEACAM4, CEACAM5, CEACAM6 und CEACAM7 are not tested so far. The experiment was performed by Dr. Bernhard Singer, University Hospital Essen, Germany