Recombinant CEAM1 protein (His tag)

Catalog Number	537529
Synonyms	Biliary glycoprotein 1; BGP-1; Carcinoembryonic antigen-related cell adhesion molecule 1; CEA cell adhesion molecule 1; CD antigen CD66a
Species	Human
Expression System	E. coli
Accession	P13688
Molecular Weight	Predictes a molecular mass of 44.96 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 45 kDa band.

Product Information

Sequence Region	35-428
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>85%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 35-428 aa (P13688) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	Recombinant Human CEACAM1 (CD66a) Fragment (aa 35-428) is a high-purity protein encompassing the complete extracellular Ig-like domains (V-type and three C2-types) of the cell adhesion molecule. This fragment serves as an essential tool for investigating homophilic interactions, immune regulation, and signaling pathways in calcium-independent cell adhesion studies. CEACAM1 is a multifunctional cell adhesion protein that mediates homophilic interactions in a calcium-independent manner and acts as a coinhibitory receptor in immune responses. It regulates T-cell cytotoxicity, neutrophil activation, insulin signaling, and angiogenesis through phosphorylation-dependent mechanisms and interactions with partners like PTPN6. The full-length protein localizes to the plasma membrane, particularly at lateral junctions and apical surfaces, where it forms dimers and oligomers. The provided fragment (aa 35-428) includes the Ig-like V-type and C2-type domains, which are critical for ligand binding and receptor functions, enabling focused studies on adhesion and immune modulation without transmembrane regions.