Recombinant HECAM protein (His tag)

Catalog Number	545003
Synonyms	glialCAM; Hepatocyte cell adhesion molecule; Protein hepaCAM
Species	Human
Expression System	E. coli
Accession	Q14CZ8
Molecular Weight	Predictes a molecular mass of 24.71 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 25 kDa band.

Product Information

Sequence Region	34-240
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>90%, 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 34-240 aa (Q14CZ8) 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 Hepatic and Glial Cell Adhesion Molecule (HEPACAM) Fragment (Amino Acids 34-240) is a high-purity protein designed for studying cell adhesion, motility, and ion channel regulation. This fragment encompasses the essential Ig-like V-type and C2-type domains, making it an ideal tool for investigating domain-specific functions in cellular interactions and signaling pathways. The full-length Hepatic and Glial Cell Adhesion Molecule (HEPACAM) is a human protein involved in regulating cell motility, cell-matrix interactions, and suppression of cell proliferation. It localizes to the cytoplasm and cell membrane as a single-pass type I membrane protein, with its cytoplasmic side playing a key role in intracellular signaling. In glial cells, HEPACAM associates with the chloride channel CLCN2 at astrocytic processes and myelinated fiber tracts, where it helps regulate transcellular chloride flux, influencing neuron excitability. Its subcellular distribution is cell density-dependent, localizing to perinuclear membranes and cytoplasmic protrusions in sparse cells, while concentrating at cell-cell contact regions in confluent cells, where it colocalizes with cadherin-1 (CDH1). These characteristics underscore its importance in cellular adhesion mechanisms and neurological function.