Recombinant CD82 protein (His tag)

Catalog Number	546882
Synonyms	C33 antigen; IA4; Inducible membrane protein R2; Metastasis suppressor Kangai-1; Suppressor of tumorigenicity 6 protein; Tetraspanin-27; Tspan-27; CD antigen CD82
Species	Human
Expression System	E. coli
Accession	P27701
Molecular Weight	Predictes a molecular mass of 15.20 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 17 kDa band.

Product Information

Sequence Region	111-228
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, 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 111-228 aa (P27701) 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 CD82 antigen fragment (residues 111-228) is a stable and soluble protein unit derived from the human CD82 protein, designed for structural and biochemical research. This fragment supports studies on tetraspanin-enriched microdomains, cell signaling, and metastasis suppression, offering a reliable tool for investigating protein interactions and mechanisms. The full-length CD82 antigen is a multi-pass membrane protein in Homo sapiens, functioning as a structural component of tetraspanin-enriched microdomains (TERMs) that facilitate receptor clustering and signaling. It plays critical roles in attenuating EGF signaling by promoting EGFR endocytosis and desensitization, modulating integrin-mediated adhesion and migration, and regulating immune responses through interactions with TLR pathways. CD82 also controls angiogenesis by sequestering VEGFA and PDGFB, inhibiting their signaling. Located primarily in the cell membrane and cytoplasmic vesicles, it acts as a metastasis suppressor and is involved in antigen presentation and inflammatory response modulation.