Recombinant CD63 protein (His tag)

Catalog Number	544341
Synonyms	Granulophysin; Lysosomal-associated membrane protein 3; LAMP-3; Lysosome integral membrane protein 1; Limp1; Melanoma-associated antigen ME491; OMA81H; Ocular melanoma-associated antigen; Tetraspanin-30; Tspan-30; CD antigen CD63
Species	Human
Expression System	E. coli
Accession	P08962
Molecular Weight	Predictes a molecular mass of 13.18 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 13 kDa band.

Product Information

Sequence Region	103-203
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 103-203 aa (P08962) 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 CD63 Antigen Fragment (aa 103-203) is a highly stable and soluble protein unit derived from the CD63 antigen, a multifunctional tetraspanin involved in cellular signaling, vesicular transport, and cell adhesion processes. This fragment is expertly designed for structural and biochemical studies, offering researchers a reliable tool to investigate CD63's molecular mechanisms without the complexities of the full-length membrane protein. The full-length CD63 antigen, also known as Tetraspanin-30 or LAMP-3, functions as a cell surface receptor for TIMP1 and plays a critical role in activating cellular signaling cascades. It promotes integrin signaling leading to AKT, FAK/PTK2, and MAP kinase activation, thereby influencing cell survival, cytoskeletal reorganization, adhesion, and migration. CD63 is also essential for intracellular vesicular transport, including melanocyte development through PMEL trafficking and leukocyte adhesion via SELP regulation. Localized to multiple membrane compartments including the cell surface, lysosomes, late endosomes, multivesicular bodies, and melanosomes, CD63 is also secreted in extracellular exosomes, reflecting its diverse roles in cellular communication and organelle dynamics.