Recombinant STOM protein (His tag)

Catalog Number	542230
Synonyms	Erythrocyte band 7 integral membrane protein; Erythrocyte membrane protein band 7.2; Protein 7.2b
Species	Human
Expression System	E. coli
Accession	P27105
Molecular Weight	Predictes a molecular mass of 33.39 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 33 kDa band.

Product Information

Sequence Region	1-288
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 1-288 aa (P27105) 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 Stomatin (Erythrocyte band 7 integral membrane protein) fragment (amino acids 1-288) - a highly purified protein preparation ideal for studying ion channel regulation and transmembrane transport mechanisms. This stable, soluble fragment maintains key functional domains, making it perfect for structural studies and biochemical assays. Stomatin, encoded by the STOM gene, is a crucial regulatory protein that modulates ion channel activity and transmembrane ion transport in human cells. It specifically regulates ASIC2 and ASIC3 channel activity, playing important roles in cellular signaling and homeostasis. The protein localizes to multiple cellular compartments including the cell membrane as a peripheral membrane protein on the cytoplasmic side, membrane rafts, melanosomes, and cytoplasmic vesicles. It associates with cortical actin microfilaments and translocates from alpha-granular lipid rafts to the cell membrane upon thrombin activation, becoming enriched in released microvesicles. This dynamic subcellular distribution underscores its importance in various cellular processes and membrane-associated functions.