Recombinant STRA6 protein (His tag)

Catalog Number	545848
Synonyms	Retinol-binding protein receptor STRA6; Stimulated by retinoic acid gene 6 protein homolog
Species	Human
Expression System	E. coli
Accession	Q9BX79
Molecular Weight	Predictes a molecular mass of 12.62 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 13 kDa band.

Product Information

Sequence Region	495-592
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>87%, 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 495-592 aa (Q9BX79) 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	This recombinant protein is a 98-amino acid fragment (residues 495-592) of the human Receptor for Retinol Uptake STRA6 (STRA6), a key transporter involved in vitamin A homeostasis. The fragment has been computationally selected for stability and solubility, making it an ideal tool for structural studies and biochemical assays targeting retinol transport mechanisms. The full-length STRA6 protein functions as a retinol transporter, facilitating the uptake of all-trans retinol from extracellular retinol-binding protein RBP4 across the cell membrane and transferring it to cytoplasmic RBP1. This process is critical for vitamin A homeostasis and is enhanced by LRAT, which converts retinol to storage forms. STRA6 also contributes to a signaling cascade involving JAK2/STAT5 activation, influencing SOCS3 expression and insulin response modulation. It is particularly vital in the eye and under conditions of dietary vitamin A deficiency. STRA6 is localized to the cell membrane as a multi-pass membrane protein, with specific basolateral membrane localization in the retinal pigment epithelium, and does not transport retinoic acid.