Recombinant LSR protein (His tag)

Catalog Number	540654
Synonyms	Angulin-1
Species	Human
Expression System	E. coli
Accession	Q86X29
Molecular Weight	Predictes a molecular mass of 22.19 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 22 kDa band.

Product Information

Sequence Region	72-259
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>86%, 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 72-259 aa (Q86X29) 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 Lipolysis-stimulated lipoprotein receptor (Angulin-1) Fragment (72-259) is a highly purified protein that encompasses the Ig-like V-type domain of LSR. This specific fragment serves as an essential tool for researchers studying lipoprotein receptor function and tricellular tight junction biology, offering targeted insights into domain-specific mechanisms. The full-length Lipolysis-stimulated lipoprotein receptor (LSR/Angulin-1) plays a critical role in the clearance of triglyceride-rich lipoproteins from blood circulation, binding chylomicrons, LDL, and VLDL in the presence of free fatty acids to facilitate cellular uptake. Additionally, LSR maintains epithelial barrier integrity by recruiting MARVELD2/tricellulin to tricellular tight junctions. This protein is localized at the cell membrane as a single-pass type I membrane protein and specifically concentrates at tricellular contacts within tight junctions, highlighting its dual functionality in lipid metabolism and epithelial barrier maintenance.