Recombinant ILDR2 protein (His tag)

Catalog Number	542980
Synonyms	Angulin-3
Species	Human
Expression System	E. coli
Accession	Q71H61
Molecular Weight	Predictes a molecular mass of 20.31 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 20 kDa band.

Product Information

Sequence Region	21-186
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 21-186 aa (Q71H61) 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 Immunoglobulin-like domain-containing receptor 2 (Angulin-3) fragment (amino acids 21-186) is a high-purity protein designed for studying the Ig-like V-type functional domain. This product is ideal for investigating ER stress pathways, epithelial barrier maintenance, and immune regulatory functions in life science research. Immunoglobulin-like domain-containing receptor 2 (ILDR2/Angulin-3) is a human protein involved in multiple critical biological processes. It participates in endoplasmic reticulum stress pathways affecting lipid homeostasis and insulin secretion, and collaborates with ILDR1 and LSR to maintain epithelial barrier function by recruiting MARVELD2/tricellulin to tricellular tight junctions. Additionally, ILDR2 functions as a B7-like protein family member with T-cell inhibitory activity on immune cells and inflamed tissues. The protein localizes to the endoplasmic reticulum membrane, tight junctions, and nucleus, indicating its diverse functional roles in cellular organization, immune regulation, and potentially RNA splicing regulation in the inner ear.