Recombinant ILRL1 protein (His tag)

Catalog Number	544820
Synonyms	Protein ST2
Species	Human
Expression System	E. coli
Accession	Q01638
Molecular Weight	Predictes a molecular mass of 36.65 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 37 kDa band.

Product Information

Sequence Region	19-328
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 19-328 aa (Q01638) 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 Interleukin-1 receptor-like 1 (IL1RL1/ST2) Fragment (aa 19-328) is a high-purity protein encompassing the three Ig-like C2-type domains essential for ligand interaction and signaling. This fragment serves as an invaluable tool for investigating the structural and functional mechanisms of IL-33-mediated immune responses and tissue homeostasis. Interleukin-1 receptor-like 1 (IL1RL1/ST2) is a key receptor for interleukin-33 (IL-33), playing a critical role in innate and adaptive immunity, tissue homeostasis, and responses to environmental stress. Upon IL-33 binding, it recruits signaling adaptors like MYD88, IRAK1, IRAK4, and TRAF6, leading to phosphorylation of MAPK pathways (ERK1/2, MAPK14, MAPK8). It contributes to helper T-cell function and, during tissue injury, promotes mitochondrial rewiring via UCP2 to reduce reactive oxygen species and support alternative macrophage activation. Isoform C is membrane-bound, while Isoform B is secreted and acts as an inhibitor of IL-33 signaling. This recombinant fragment spans residues 19-328, covering the functional Ig-like domains for targeted research applications.