Recombinant COTL1 protein (His tag)

Catalog Number	542659
Species	Human
Expression System	E. coli
Accession	Q14019
Molecular Weight	Predictes a molecular mass of 17.47 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 19 kDa band.

Product Information

Sequence Region	2-142
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, 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 2-142 aa (Q14019) 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 Coactosin-like Protein (COTL1) Fragment (aa 2-142) is a high-purity protein designed for studying actin-binding and leukotriene synthesis regulation. This fragment fully encompasses the ADF-H domain, making it an ideal tool for investigating specific domain functions in cytoskeletal dynamics and inflammatory pathways. Coactosin-like protein (COTL1) is a human protein that binds to F-actin in a calcium-independent manner without directly affecting actin depolymerization. It serves as a chaperone for ALOX5 (5-lipoxygenase), critically influencing both the stability and activity of this enzyme in leukotriene synthesis—key mediators in inflammatory responses. The protein localizes to the cytoplasm, cytoskeleton, and nucleus, indicating versatile roles in cellular structure and signaling. This recombinant fragment provides a focused approach to explore these mechanisms by containing the essential functional domains.