Recombinant TRI48 protein (His tag)

Catalog Number	547691
Synonyms	RING finger protein 101; Tripartite motif-containing protein 48
Species	Human
Expression System	E. coli
Accession	Q8IWZ4
Molecular Weight	Predictes a molecular mass of 28.07 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 28 kDa band.

Product Information

Sequence Region	1-224
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 1-224 aa (Q8IWZ4) 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 E3 ubiquitin-protein ligase TRIM48 fragment (amino acids 1-224), a stable and soluble unit ideal for structural and biochemical studies. This fragment retains key functional regions, enabling research into ubiquitination pathways and protein degradation mechanisms. TRIM48 is an E3 ubiquitin-protein ligase that promotes K48-linked polyubiquitination of protein methyltransferase PRMT1, leading to its degradation. This activity suppresses methylation of PRMT1 substrates MAP3K5/ASK1 and FOXO1, resulting in enhanced MAP3K5-dependent cell death under oxidative stress and inhibition of FOXO1 transcriptional activity. The protein is localized in the cytoplasm and cytosol, where it performs its regulatory functions in cellular stress response and signaling pathways.