Recombinant SUMO4 protein (His tag)

Catalog Number	545192
Synonyms	SUMO-4; Small ubiquitin-like protein 4
Species	Human
Expression System	E. coli
Accession	Q6EEV6
Molecular Weight	Predictes a molecular mass of 12.04 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 12 kDa band.

Product Information

Sequence Region	1-93
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>85%, 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 1-93 aa (Q6EEV6) 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 Small ubiquitin-related modifier 4 (SUMO-4) Fragment (1-93) is a high-purity, stable protein fragment designed for structural and biochemical studies. This fragment encompasses the full ubiquitin-like domain, offering researchers a soluble and functional unit ideal for investigating SUMOylation mechanisms and protein modification pathways. Small ubiquitin-related modifier 4 (SUMO-4) is a ubiquitin-like protein in humans that covalently attaches to target lysine residues on substrate proteins, modulating their subcellular localization, stability, or activity without promoting degradation. Under oxidative stress, SUMO-4 conjugates to antioxidant enzymes, chaperones, and stress defense proteins, and it regulates transcriptional activity by modifying factors such as NFKBIA, TFAP2A, FOS, and NR3C1. Its covalent attachment requires activation by the E1 complex SAE1-SAE2 and linkage to the E2 enzyme UBE2I, highlighting its role in cellular stress response and gene expression control.