Recombinant USPL1 protein (His tag)

Catalog Number	547466
Synonyms	Ubiquitin-specific peptidase-like protein 1; USP-like 1
Species	Human
Expression System	E. coli
Accession	Q5W0Q7
Molecular Weight	Predictes a molecular mass of 33.85 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 34 kDa band.

Product Information

Sequence Region	225-501
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 225-501 aa (Q5W0Q7) 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 USPL1 (225-501) Fragment - A high-purity protein fragment containing the complete USP domain of SUMO-specific isopeptidase USPL1, ideal for studying SUMO processing and desumoylation mechanisms in vitro. SUMO-specific isopeptidase USPL1 (Ubiquitin-specific peptidase-like protein 1) is a key enzyme involved in protein desumoylation processes. This human protein specifically binds to SUMO proteins with higher affinity for SUMO2 and SUMO3, which it cleaves more efficiently than other SUMO variants. USPL1 plays a crucial role in processing full-length SUMO proteins to their mature forms and is essential for RNA polymerase-II-mediated snRNA transcription within Cajal bodies. The protein localizes to the nucleus and Cajal bodies, where it functions as a component of complexes that bind to U snRNA genes, highlighting its importance in transcriptional regulation and RNA processing pathways.