Recombinant UFSP2 protein (His tag)

Catalog Number	546072
Synonyms	UfSP2
Species	Human
Expression System	E. coli
Accession	Q9NUQ7
Molecular Weight	Predictes a molecular mass of 54.92 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 55 kDa band.

Product Information

Sequence Region	1-469
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, 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 1-469 aa (Q9NUQ7) 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 Ufm1-specific protease 2 (UfSP2) (EC 3.4.22.-) fragment (residues 1-469) from Homo sapiens, designed for structural and biochemical studies. This fragment represents a stable, soluble unit optimized for investigating the deUFMylase activity and regulatory roles of UFSP2 in cellular processes. UfSP2 is a thiol-dependent isopeptidase that specifically cleaves UFM1, a ubiquitin-like modifier, from conjugated proteins such as CD274/PD-L1, CYB5R3, DDRGK1, MRE11, RPL26/uL24, and TRIP4. While it can process UFM1 precursors, its primary function is as a deUFMylase, mediating the deconjugation of UFM1 from target proteins. Key roles include deUFMylating RPL26/uL24 to facilitate ribosome subunit recycling from the endoplasmic reticulum and regulating TRIP4 to influence nuclear receptor transactivation, cell proliferation, and differentiation. UfSP2 is localized to the endoplasmic reticulum, cytoplasm, and nucleus, underscoring its involvement in diverse cellular compartments and pathways.