Recombinant FAF2 protein (His tag)

Catalog Number	540962
Synonyms	UBX domain-containing protein 3B; UBX domain-containing protein 8
Species	Human
Expression System	E. coli
Accession	Q96CS3
Molecular Weight	Predictes a molecular mass of 54.15 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 60 kDa band.

Product Information

Sequence Region	2-445
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 2-445 aa (Q96CS3) 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 FAS-associated factor 2 (FAF2) fragment (aa 2-445) is a high-purity protein preparation encompassing the complete UBA and UBX domains. This fragment serves as an essential research tool for investigating endoplasmic reticulum-associated degradation (ERAD), lipid droplet regulation, and stress granule dynamics, providing researchers with domain-specific functionality for mechanistic studies. FAS-associated factor 2 (FAF2) is a multifunctional protein critically involved in endoplasmic reticulum-associated degradation (ERAD), where it mediates ubiquitin-dependent degradation of misfolded endoplasmic reticulum proteins. The protein plays a regulatory role in the insulin-like growth factor receptor signaling pathway by controlling IGF1R receptor expression and is involved in lipid metabolism through inhibition of lipid droplet degradation by binding to phospholipase PNPL2. Additionally, FAF2 contributes to cellular stress response by promoting stress granule disassembly through interaction with ubiquitinated G3BP1 and VCP. The protein localizes to multiple cellular compartments including the cytoplasm, lipid droplets, and endoplasmic reticulum, reflecting its diverse functional roles in protein quality control, lipid metabolism, and stress response pathways.