Recombinant FBX2 protein (His tag)

Catalog Number	543852
Species	Human
Expression System	E. coli
Accession	Q9UK22
Molecular Weight	Predictes a molecular mass of 31.67 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 36 kDa band.

Product Information

Sequence Region	32-296
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>90%, 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 32-296 aa (Q9UK22) 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 F-box only protein 2 (FBXO2) fragment (aa 32-296) is a high-purity protein preparation designed for functional studies. This fragment fully encompasses the critical F-box and FBA domains, making it an ideal tool for investigating substrate recognition in the SCF E3 ubiquitin ligase complex and endoplasmic reticulum-associated degradation pathways. F-box only protein 2 (FBXO2) serves as a substrate recognition component of the SCF E3 ubiquitin-protein ligase complex, playing a crucial role in the ubiquitination and subsequent proteasomal degradation of target proteins. It is particularly important in the endoplasmic reticulum-associated degradation (ERAD) pathway, where it recognizes and binds sugar chains on misfolded glycoproteins that have been retrotranslocated into the cytosol. This recognition promotes ubiquitination and prevents the formation of cytosolic aggregates of unfolded glycoproteins. The protein demonstrates specificity for denatured glycoproteins, with preferential binding to high-mannose types. FBXO2 localizes to the cytoplasm and associates with microsome membranes as a peripheral membrane protein on the cytoplasmic side, positioning it strategically for its role in quality control of retrotranslocated proteins.