Recombinant DDI2 protein (His tag)

Catalog Number	538214
Species	Human
Expression System	E. coli
Accession	Q5TDH0
Molecular Weight	Predictes a molecular mass of 31.52 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 35 kDa band.

Product Information

Sequence Region	134-399
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 134-399 aa (Q5TDH0) 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 Protein DDI1 homolog 2 (DDI2) fragment (residues 134-399) is a high-quality, soluble protein designed for structural and biochemical studies. This fragment, derived from the aspartic protease DDI2, supports research into its role in NFE2L1/NRF1 processing and replication stress response. Protein DDI1 homolog 2 (DDI2) is an aspartic protease that cleaves ubiquitinated NFE2L1/NRF1 at 'Leu-104', facilitating its release from the endoplasmic reticulum membrane and contributing to cellular stress adaptation. It also functions as a proteasomal shuttle, aiding in the removal of replication fork proteins like RTF2 during replication stress to promote cell cycle progression and maintain genome integrity. DDI2 is localized in the cytoplasm and cytosol, with additional presence on chromosomes, highlighting its involvement in critical nuclear and cytoplasmic processes related to protein degradation and DNA replication fidelity.