Recombinant DDI1 protein (His tag)

Catalog Number	545549
Species	Human
Expression System	E. coli
Accession	Q8WTU0
Molecular Weight	Predictes a molecular mass of 30.41 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 32 kDa band.

Product Information

Sequence Region	142-396
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 142-396 aa (Q8WTU0) 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	This product is a recombinant fragment of Human Protein DDI1 homolog 1 (EC 3.4.23.-), spanning residues 142-396. It represents a stable and soluble unit ideal for investigating the protein's role as a proteasomal shuttle and its involvement in cellular survival and genome integrity following replication stress. Protein DDI1 homolog 1, encoded by the DDI1 gene in Homo sapiens, is a probable aspartic protease that functions as a proteasomal shuttle, linking the proteasome to replication fork proteins such as RTF2. It is essential, often redundantly with DDI2, for cellular survival after replication stress by removing RTF2 from stalled forks, enabling cell cycle progression and maintaining genome integrity. This supports critical processes in DNA replication and stress response, highlighting its importance in cellular homeostasis.