Recombinant PIDD1 protein (His tag)

Catalog Number	541291
Synonyms	Leucine-rich repeat and death domain-containing protein
Species	Human
Expression System	E. coli
Accession	Q9HB75
Molecular Weight	Predictes a molecular mass of 53.59 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 54 kDa band.

Product Information

Sequence Region	446-910
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>85%, 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 446-910 aa (Q9HB75) 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 recombinant protein product features a specific fragment (residues 446-910) of the human p53-induced death domain-containing protein 1 (PIDD1), encompassing the ZU5 2 and Death functional domains. It serves as an essential tool for researchers studying apoptosis regulation, DNA damage response pathways, and domain-specific molecular interactions in cellular stress mechanisms. The full-length PIDD1 protein is a crucial component of the DNA damage and stress response pathway, functioning downstream of p53/TP53 to regulate cell fate decisions between survival and apoptosis. It forms the PIDDosome complex with CRADD and CASP2 to activate caspase-2 and initiate apoptosis, while also interacting with IKBKG and RIPK1 to enhance NF-kappa-B activation through sumoylation and ubiquitination processes. PIDD1 localizes to both the cytoplasm and nucleus, with nuclear enrichment observed during DNA damage conditions, highlighting its dynamic role in cellular stress signaling networks.