Recombinant RD23B protein (His tag)

Catalog Number	542420
Synonyms	HR23B; hHR23B; XP-C repair-complementing complex 58 kDa protein; p58
Species	Human
Expression System	E. coli
Accession	P54727
Molecular Weight	Predictes a molecular mass of 10.17 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 11 kDa band.

Product Information

Sequence Region	1-75
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>87%, 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 1-75 aa (P54727) 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 75-amino acid fragment (residues 1-75) of the Human UV excision repair protein RAD23 homolog B (HR23B). Designed for structural and biochemical studies, this fragment represents a stable and soluble unit of the protein, ideal for investigating its role in DNA damage recognition and proteasomal degradation pathways. The full-length Human RAD23B protein is a multiubiquitin chain receptor that modulates proteasomal degradation by binding polyubiquitin chains and delivering ubiquitinated substrates to the 26S proteasome. It plays a critical role in global genome nucleotide excision repair (GG-NER) as part of the XPC complex, where it stabilizes XPC and aids in recognizing a wide spectrum of DNA helix distortions, such as those caused by UV damage or chemical adducts. Additionally, RAD23B is implicated in endoplasmic reticulum-associated degradation (ERAD) by associating with PNGase to facilitate the degradation of misfolded glycoproteins. Subcellularly, it localizes to the nucleus and cytoplasm in a cell cycle-dependent manner, with nuclear levels decreasing during S-phase and relocalization to the cytoplasm upon mitosis, reflecting its dynamic involvement in cellular repair and protein quality control mechanisms.