Recombinant RD23A protein (His tag)

Catalog Number	544707
Synonyms	HR23A; hHR23A
Species	Human
Expression System	E. coli
Accession	P54725
Molecular Weight	Predictes a molecular mass of 15.89 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 16 kDa band.

Product Information

Sequence Region	161-285
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, 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 161-285 aa (P54725) 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 RAD23A (UV excision repair protein RAD23 homolog A) fragment (residues 161-285), encompassing the UBA 1 domain. This high-purity protein is an essential tool for investigating ubiquitin-binding mechanisms, proteasomal degradation, and DNA repair pathways in targeted research applications. The full-length UV excision repair protein RAD23 homolog A (HR23A) is a multifunctional nuclear protein in Homo sapiens that serves as a key multiubiquitin chain receptor, modulating proteasomal degradation by binding preferentially to 'Lys-48'-linked polyubiquitin chains. It plays a critical role in nucleotide excision repair, where it dimerizes with XPC to stabilize it and enable DNA damage recognition and repair activity. Additionally, RAD23A is implicated in HIV-1 replication in non-proliferating cells by facilitating the association of viral protein Vpr with host proteasomes. The protein's nuclear localization underscores its central functions in DNA maintenance and protein quality control mechanisms.