Recombinant RIR2B protein (His tag)

Catalog Number	547580
Synonyms	TP53-inducible ribonucleotide reductase M2 B; p53-inducible ribonucleotide reductase small subunit 2-like protein; p53R2
Species	Human
Expression System	E. coli
Accession	Q7LG56
Molecular Weight	Predictes a molecular mass of 37.98 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 42 kDa band.

Product Information

Sequence Region	1-313
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 1-313 aa (Q7LG56) 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 Ribonucleoside-diphosphate reductase subunit M2 B (RRM2B) fragment (amino acids 1-313) from Homo sapiens. This stable, soluble protein fragment is ideal for studying DNA repair mechanisms, enzyme kinetics, and p53-dependent cellular stress responses in biochemical and structural research applications. RRM2B (p53R2) plays a critical role in maintaining genomic integrity through p53/TP53-dependent DNA damage repair. The full-length protein supplies deoxyribonucleotides specifically for DNA repair processes in G1/G2-arrested cells, forming an active ribonucleotide reductase complex with RRM1. It contains an essential iron-tyrosyl free radical center for catalytic activity and translocates from cytoplasm to nucleus upon DNA damage, highlighting its importance in cellular stress response pathways and survival mechanisms.