Recombinant RT29 protein (His tag)

Catalog Number	544674
Synonyms	28S ribosomal protein S29, mitochondrial; MRP-S29; S29mt; Death-associated protein 3; DAP-3; Ionizing radiation resistance conferring protein
Species	Human
Expression System	E. coli
Accession	P51398
Molecular Weight	Predictes a molecular mass of 41.95 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 42 kDa band.

Product Information

Sequence Region	48-398
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 48-398 aa (P51398) 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 Small ribosomal subunit protein mS29 (DAP3) fragment (residues 48-398) is a high-quality protein product designed for mitochondrial ribosome and cell death research. This 351-amino acid fragment is computationally optimized for stability and solubility, making it ideal for structural studies, biochemical assays, and functional investigations into mitochondrial translation and interferon-gamma-induced apoptosis pathways. The full-length Small ribosomal subunit protein mS29, also known as DAP3, is a multifunctional mitochondrial protein encoded by the DAP3 gene in humans. It serves as an essential component of the mitochondrial small ribosomal subunit, where it contributes to the translation of mitochondrial mRNAs and exhibits in vitro GTPase activity. Beyond its ribosomal role, DAP3 is critically involved in mediating interferon-gamma-induced cell death, linking it to key apoptotic pathways. The protein is localized exclusively within the mitochondrion, underscoring its central role in mitochondrial function and cellular energy regulation, with implications for understanding radiation resistance and programmed cell death mechanisms.