Recombinant TSAP1 protein (His tag)

Catalog Number	541384
Synonyms	SECp43; tRNA selenocysteine-associated protein 1
Species	Human
Expression System	E. coli
Accession	Q9NX07
Molecular Weight	Predictes a molecular mass of 20.98 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 21 kDa band.

Product Information

Sequence Region	1-176
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>86%, 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 1-176 aa (Q9NX07) 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 SECp43 (TRNAU1AP) Fragment (1-176) – a high-purity protein fragment encompassing the RRM 1 and RRM 2 domains, designed for studying selenocysteine biosynthesis and tRNA(Sec) charging mechanisms in selenoprotein synthesis. SECp43, encoded by the TRNAU1AP gene, plays a critical role in selenocysteine biosynthesis and the incorporation of selenocysteine into selenoproteins. It is involved in early steps of selenocysteine formation and tRNA(Sec) charging, stabilizes the SECISBP2-EEFSEC-tRNA(Sec) complex, and may participate in tRNA(Sec) methylation, enhancing selenoprotein synthesis efficiency. The protein localizes to both the nucleus and cytoplasm, with abundance in the nucleus, reflecting its regulatory functions in gene expression and translation processes related to selenium metabolism.