Recombinant SAM50 protein (His tag)

Catalog Number	541625
Synonyms	Transformation-related gene 3 protein; TRG-3
Species	Human
Expression System	E. coli
Accession	Q9Y512
Molecular Weight	Predictes a molecular mass of 49.15 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 49 kDa band.

Product Information

Sequence Region	43-469
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 43-469 aa (Q9Y512) 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 SAMM50 (43-469) is a high-purity protein fragment encompassing the POTRA domain of Sorting and assembly machinery component 50 homolog. This product is engineered for researchers investigating mitochondrial structure maintenance, cristae organization, and assembly mechanisms of respiratory chain complexes, providing a targeted tool for domain-specific functional studies. The full-length SAMM50 protein, also known as Transformation-related gene 3 protein (TRG-3), plays a crucial role in maintaining mitochondrial cristae architecture and ensuring proper assembly of mitochondrial respiratory chain complexes. Located primarily in the mitochondrial outer membrane as a multi-pass membrane protein, SAMM50 is essential for the integration of TOMM40 into the TOM complex, facilitating protein import into mitochondria. These functions highlight its fundamental importance in mitochondrial biology and cellular energy production pathways.