Recombinant YAE1 protein (His tag)

Catalog Number	549102
Synonyms	Yae1 domain-containing protein 1
Species	Human
Expression System	E. coli
Accession	Q9NRH1
Molecular Weight	Predictes a molecular mass of 15.63 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 16 kDa band.

Product Information

Sequence Region	1-125
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, 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 1-125 aa (Q9NRH1) 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 Protein YAE1 homolog (YAE1) fragment (residues 1-125) is a high-purity, stable protein designed for structural and biochemical studies. This soluble fragment represents a key functional region of YAE1, which plays a critical role in ribosomal biogenesis and translation initiation, making it an ideal tool for investigating cytosolic iron-sulfur protein assembly and ABCE1 recruitment mechanisms. The full-length Protein YAE1 homolog (YAE1) in Homo sapiens functions as part of the LTO1:YAE1 complex, serving as a target-specific adapter that likely recruits apo-ABCE1 to the cytosolic iron-sulfur protein assembly (CIA) machinery. This activity is essential for the biogenesis of the large ribosomal subunit and the initiation of translation, highlighting its importance in cellular protein synthesis. YAE1 is localized in both the cytoplasm and nucleus, underscoring its involvement in fundamental processes across cellular compartments. The provided fragment (residues 1-125) was selected for its stability and solubility, enabling detailed analysis of YAE1's molecular interactions without the full-length protein's complexity.