Recombinant NEMF protein (His tag)

Catalog Number	541817
Synonyms	Antigen NY-CO-1; Nuclear export mediator factor; Serologically defined colon cancer antigen 1
Species	Human
Expression System	E. coli
Accession	O60524
Molecular Weight	Predictes a molecular mass of 49.11 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 53 kDa band.

Product Information

Sequence Region	1-413
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 1-413 aa (O60524) 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 NEMF (Ribosome quality control complex subunit NEMF) fragment (amino acids 1-413) is a high-purity protein designed for studying ribosome-associated quality control mechanisms. This stable, soluble fragment supports research into translational surveillance and protein degradation pathways. NEMF is a key component of the ribosome quality control complex (RQC) that extracts incomplete nascent chains from stalled ribosomes and facilitates their ubiquitin-mediated degradation. Located primarily in the cytosol, NEMF recognizes exposed tRNA moieties on stalled 60S ribosomal subunits, recruits LTN1, and mediates CAT tailing - a non-templated elongation process that promotes ubiquitination by exposing lysine residues or creating C-degron signals. This quality control mechanism prevents accumulation of potentially toxic polypeptides and maintains cellular protein homeostasis. The protein has also been implicated in nuclear export processes and is clinically relevant as serologically defined colon cancer antigen 1 (NY-CO-1).