Recombinant MTNA protein (His tag)

Catalog Number	543513
Synonyms	M1Pi; MTR-1-P isomerase; Mediator of RhoA-dependent invasion; S-methyl-5-thioribose-1-phosphate isomerase; Translation initiation factor eIF-2B subunit alpha/beta/delta-like protein
Species	Human
Expression System	E. coli
Accession	Q9BV20
Molecular Weight	Predictes a molecular mass of 40.81 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 41 kDa band.

Product Information

Sequence Region	1-369
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 1-369 aa (Q9BV20) 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 Methylthioribose-1-phosphate isomerase (MRI1) fragment (residues 1-369) is a high-purity protein designed for structural and biochemical studies. This fragment encompasses the full-length functional domain, offering a stable and soluble unit ideal for investigating enzymatic activity and its role in cellular invasion pathways. Methylthioribose-1-phosphate isomerase (MRI1) catalyzes the interconversion of methylthioribose-1-phosphate to methylthioribulose-1-phosphate, a key step in methionine salvage. Beyond its catalytic function, it promotes cell invasion under constitutive RhoA activation by enhancing FAK tyrosine phosphorylation and stress fiber turnover. The protein localizes primarily to the nucleus but shifts to the cytoplasm in cancer cells, with enrichment at the leading edge of the plasma membrane in late-stage tumors, highlighting its relevance in oncogenic processes.