Recombinant ENOF1 protein (His tag)

Catalog Number	545290
Synonyms	Antisense RNA to thymidylate synthase; rTS; L-fuconate dehydratase
Species	Human
Expression System	E. coli
Accession	Q7L5Y1
Molecular Weight	Predictes a molecular mass of 51.45 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 53 kDa band.

Product Information

Sequence Region	1-443
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 1-443 aa (Q7L5Y1) 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 Mitochondrial Enolase Superfamily Member 1 (ENOSF1) Fragment (residues 1-443) is a high-purity protein designed for structural and biochemical studies. This fragment encompasses the full-length protein's functional domain, offering a stable and soluble unit ideal for investigating L-fuconate metabolism and enzyme mechanisms. Mitochondrial Enolase Superfamily Member 1 (ENOSF1) is a human enzyme encoded by the ENOSF1 gene, localized to the mitochondrion. It plays a critical role in the catabolism of L-fucose, a sugar component of cellular glycoproteins, by catalyzing the dehydration of L-fuconate to 2-keto-3-deoxy-L-fuconate. This magnesium-dependent reaction involves abstracting the 2-proton to form an enediolate intermediate, highlighting its importance in metabolic pathways. The full-length protein's mitochondrial localization and enzymatic activity underscore its relevance in cellular energy and sugar processing.