Recombinant EKI2 protein (His tag)

Catalog Number	543746
Synonyms	EKI 2; Ethanolamine kinase-like protein
Species	Human
Expression System	E. coli
Accession	Q9NVF9
Molecular Weight	Predictes a molecular mass of 41.23 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 41 kDa band.

Product Information

Sequence Region	50-386
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>86%, 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 50-386 aa (Q9NVF9) 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 Ethanolamine Kinase 2 (EKI 2) Fragment (residues 50-386) is a highly specific enzyme engineered for ethanolamine phosphorylation studies. This 337-amino acid fragment offers a stable and soluble unit ideal for structural biology, biochemical assays, and functional investigations into phospholipid metabolism. Ethanolamine Kinase 2 (EKI 2), encoded by the ETNK2 gene in Homo sapiens, is an enzyme (EC 2.7.1.82) that exhibits high specificity for phosphorylating ethanolamine, a key step in the synthesis of phosphatidylethanolamine—a major phospholipid component of cellular membranes. Unlike related kinases, EKI 2 lacks choline kinase activity, underscoring its specialized role in ethanolamine metabolism. This specificity makes it a valuable target for research on lipid signaling, membrane biogenesis, and metabolic disorders. The recombinant fragment (residues 50-386) was computationally designed to enhance solubility and stability, facilitating experimental applications where full-length protein expression may be challenging.