Recombinant UCK1 protein (His tag)

Catalog Number	543650
Synonyms	UCK 1; Cytidine monophosphokinase 1; Uridine monophosphokinase 1
Species	Human
Expression System	E. coli
Accession	Q9HA47
Molecular Weight	Predictes a molecular mass of 28.40 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 30 kDa band.

Product Information

Sequence Region	1-235
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 1-235 aa (Q9HA47) 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 Uridine-cytidine kinase 1 (UCK1) fragment (amino acids 1-235) from Homo sapiens, engineered for high solubility and stability. This product supports structural and biochemical studies of nucleoside phosphorylation and analog activation, offering a reliable tool for kinase research. Uridine-cytidine kinase 1 (UCK1) is a human enzyme (EC 2.7.1.48) that phosphorylates uridine and cytidine to their respective monophosphates, utilizing ATP or GTP as phosphate donors. It exhibits specificity for ribonucleosides, excluding deoxyribonucleosides and purine ribonucleosides, and plays a key role in activating nucleoside analogs such as 5-fluorouridine and 6-azauridine, which are relevant in therapeutic contexts. The full-length protein's function in nucleotide salvage pathways highlights its importance in cellular metabolism and drug development, though subcellular localization data is not specified in the provided information.