Recombinant 5NT3A protein (His tag)

Catalog Number	538927
Synonyms	7-methylguanosine phosphate-specific 5'-nucleotidase; 7-methylguanosine nucleotidase; Cytosolic 5'-nucleotidase 3; Cytosolic 5'-nucleotidase III; cN-III; Pyrimidine 5'-nucleotidase 1; P5'N-1; P5N-1; PN-I; Uridine 5'-monophosphate hydrolase 1; p36
Species	Human
Expression System	E. coli
Accession	Q9H0P0
Molecular Weight	Predictes a molecular mass of 39.60 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 41 kDa band.

Product Information

Sequence Region	1-336
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>90%, 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 1-336 aa (Q9H0P0) 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 Cytosolic 5'-nucleotidase 3A (NT5C3A) fragment (amino acids 1-336) - a highly purified protein preparation ideal for structural and biochemical studies. This fragment represents a stable, soluble unit of the enzyme that specifically hydrolyzes cytidine monophosphate (CMP) and 7-methylguanosine monophosphate (m7GMP), making it an essential tool for nucleotide metabolism research. Cytosolic 5'-nucleotidase 3A (NT5C3A) is a key enzyme in nucleotide metabolism with specific activity towards cytidine monophosphate (CMP) and 7-methylguanosine monophosphate (m7GMP), with CMP being the preferred substrate. This nucleotidase functions primarily in the cytoplasm, where it plays a crucial role in regulating intracellular nucleotide pools. The enzyme's specificity for these particular nucleotides makes it important for understanding various cellular processes including RNA metabolism and nucleotide salvage pathways. The recombinant fragment (1-336) has been computationally optimized to maintain structural integrity and enzymatic activity while ensuring high solubility for experimental applications.