Recombinant GNMT protein (His tag)

Catalog Number	547312
Species	Human
Expression System	E. coli
Accession	Q14749
Molecular Weight	Predictes a molecular mass of 34.27 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 34 kDa band.

Product Information

Sequence Region	2-295
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>85%, 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 2-295 aa (Q14749) 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 Glycine N-methyltransferase (EC 2.1.1.20) fragment (residues 2-295) from Homo sapiens, designed for structural and biochemical studies. This stable, soluble protein unit retains key functional regions, enabling research into methyl group metabolism regulation. Glycine N-methyltransferase (GNMT) catalyzes the methylation of glycine using S-adenosylmethionine (AdoMet) to produce N-methylglycine (sarcosine) and S-adenosylhomocysteine (AdoHcy). This reaction is regulated by 5-methyltetrahydrofolate binding and plays a critical role in controlling the S-adenosyl-L-methionine to S-adenosyl-L-homocysteine ratio, thereby maintaining methyl group metabolic balance. The full-length protein is localized in the cytoplasm, where it executes its essential regulatory functions in cellular methylation processes.