Recombinant ANM3 protein (His tag)

Catalog Number	537262
Synonyms	Heterogeneous nuclear ribonucleoprotein methyltransferase-like protein 3
Species	Human
Expression System	E. coli
Accession	O60678
Molecular Weight	Predictes a molecular mass of 56.93 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 59 kDa band.

Product Information

Sequence Region	46-531
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 46-531 aa (O60678) 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 PRMT3 (Protein arginine N-methyltransferase 3) Fragment (aa 46-531) is a high-purity protein designed for studying type I arginine methylation. This fragment encompasses the complete SAM-dependent methyltransferase domain, making it an ideal tool for investigating enzymatic activity, substrate interactions, and epigenetic regulation in controlled experimental settings. Protein arginine N-methyltransferase 3 (PRMT3) is a type I methyltransferase that catalyzes both monomethylation and asymmetric dimethylation of arginine residues in target proteins. It plays critical roles in ribosomal function by methylating small ribosomal subunit protein uS5/RPS2 and potentially other ribosomal components. PRMT3 contributes to epigenetic regulation through asymmetric dimethylation of histone H4 at Arg-3 (H4R3me2a), promoting transcription of specific miRNAs involved in osteogenesis. Additionally, it modulates retinoic acid signaling by inhibiting ALDH1A1 retinal dehydrogenase activity. PRMT3 localizes primarily to the cytoplasm and cytosol but can translocate to the nucleus through interaction with ZNF200, where it participates in nuclear methylation events.