Recombinant ANM2 protein (His tag)

Catalog Number	547092
Synonyms	Histone-arginine N-methyltransferase PRMT2
Species	Human
Expression System	E. coli
Accession	P55345
Molecular Weight	Predictes a molecular mass of 47.65 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 49 kDa band.

Product Information

Sequence Region	31-433
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 31-433 aa (P55345) 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 Protein arginine N-methyltransferase 2 (PRMT2) fragment (residues 31-433) is a high-purity protein designed for studying arginine methylation and transcriptional regulation. This 403-amino acid fragment fully encompasses the SAM-dependent methyltransferase domain, making it an ideal tool for investigating PRMT2's enzymatic activity and co-regulatory functions in signaling pathways. Protein arginine N-methyltransferase 2 (PRMT2) is a key enzyme that catalyzes the methylation of arginine residues in various protein substrates including STAT3, FBL, and histone H4. It functions as a coactivator for multiple nuclear receptors including androgen receptor (with NCOA2), estrogen receptor, progesterone receptor, PPARγ, and retinoic acid receptor, playing crucial roles in hormone-mediated transcriptional activation. PRMT2 also regulates important cellular processes by inhibiting NF-κB transcription, promoting apoptosis, repressing E2F1 transcriptional activity in a RB1-dependent manner, and participating in growth regulation. The protein exhibits complex subcellular localization patterns across its isoforms, with predominant cytoplasmic and nuclear distribution, and undergoes hormone-dependent nuclear translocation, highlighting its dynamic role in cellular signaling and gene expression control.