Recombinant PRDM8 protein (His tag)

Catalog Number	546032
Synonyms	PR domain-containing protein 8
Species	Human
Expression System	E. coli
Accession	Q9NQV8
Molecular Weight	Predictes a molecular mass of 22.29 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 22 kDa band.

Product Information

Sequence Region	1-180
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 1-180 aa (Q9NQV8) 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 PR domain zinc finger protein 8 (PRDM8) fragment (residues 1-180) from Homo sapiens, encompassing the complete SET domain. This high-purity protein is an essential tool for investigating histone methyltransferase activity, transcriptional repression mechanisms, and neural development pathways in research applications. PRDM8 is a probable histone methyltransferase that preferentially methylates histone H3 at lysine 9, playing crucial roles in transcriptional regulation. It functions in steroidogenesis control by repressing steroidogenesis marker genes such as CYP17A1 and LHCGR. Additionally, PRDM8 forms a transcriptional repressor complex with BHLHE22 to regulate genes involved in neural development and neuronal differentiation. In the retina, it is necessary for the survival of rod bipolar and type 2 OFF-cone bipolar cells. The protein localizes to the nucleus, consistent with its role in epigenetic regulation and gene expression control. The provided fragment (1-180) contains the complete SET domain, enabling focused studies on this critical functional region.