Recombinant PRDM6 protein (His tag)

Catalog Number	546033
Synonyms	PR domain zinc finger protein 6; PR domain-containing protein 6
Species	Human
Expression System	E. coli
Accession	Q9NQX0
Molecular Weight	Predictes a molecular mass of 21.98 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 22 kDa band.

Product Information

Sequence Region	243-422
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 243-422 aa (Q9NQX0) 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 PRDM6 (243-422) Fragment: A high-purity protein fragment encompassing the SET domain of the putative histone-lysine N-methyltransferase PRDM6. This product is an essential tool for investigating the epigenetic regulatory functions of PRDM6, particularly its role in transcriptional repression and smooth muscle cell biology. PRDM6 is a putative histone methyltransferase that functions as a transcriptional repressor, playing a critical role in regulating smooth muscle gene expression and promoting the transition from differentiated to proliferative vascular smooth muscle cells. It also inhibits endothelial cell proliferation, survival, and differentiation. While its precise histone methyltransferase activity in vivo remains under investigation, studies suggest it may methylate histone H4 at 'Lys-20', a marker for epigenetic repression, or repress transcription by recruiting EHMT2/G9a. PRDM6 is localized to the nucleus, where it exerts its regulatory effects on gene expression.