Recombinant SMBT2 protein (His tag)

Catalog Number	545170
Synonyms	Scm-like with 4 MBT domains protein 2
Species	Human
Expression System	E. coli
Accession	Q5VUG0
Molecular Weight	Predictes a molecular mass of 10.87 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 11 kDa band.

Product Information

Sequence Region	814-894
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 814-894 aa (Q5VUG0) 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	Introducing the recombinant SFMBT2 (Scm-like with four MBT domains protein 2) fragment (residues 814-894), a precisely engineered 81-amino acid protein that fully encompasses the SAM domain. This high-purity fragment serves as an essential tool for researchers investigating domain-specific functions in transcriptional regulation, enabling targeted studies of protein interactions and repression mechanisms. The full-length SFMBT2 protein functions as a transcriptional repressor, specifically targeting the HOXB13 gene, as evidenced by experimental data (ECO:0000269|PubMed:23385818). Located in the nucleus, SFMBT2 plays a critical role in gene regulation by suppressing HOXB13 expression, which has implications for developmental processes and cellular differentiation. The SAM domain contained within this fragment is known to mediate protein-protein interactions and oligomerization, suggesting its importance in the repressive complex formation and functional activity of SFMBT2.