Recombinant MINT protein (His tag)

Catalog Number	545760
Synonyms	SMART/HDAC1-associated repressor protein; SPEN homolog
Species	Human
Expression System	E. coli
Accession	Q96T58
Molecular Weight	Predictes a molecular mass of 33.94 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 35 kDa band.

Product Information

Sequence Region	335-615
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 335-615 aa (Q96T58) 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 SPEN Protein Fragment (335-615) is a high-purity, functional fragment of the Msx2-interacting protein (SMART/HDAC1-associated repressor protein), encompassing three RNA recognition motifs (RRM 2, RRM 3, and RRM 4). This product is an ideal tool for investigating domain-specific interactions, transcriptional regulation, and RNA-binding activities in cellular signaling pathways. The full-length SPEN protein (UniProt ID: Q96T58) in Homo sapiens functions as a nuclear matrix platform that organizes and integrates transcriptional responses. It acts as both a transcriptional activator and an essential corepressor, synergizing with RUNX2 to enhance FGFR2-mediated activation in osteoblasts while negatively regulating the Notch pathway by interacting with RBPSUH to suppress Notch signaling. SPEN plays a critical role in cell differentiation, such as blocking precursor B-cell differentiation into marginal zone B-cells, and likely represses transcription by recruiting histone deacetylase-containing complexes. It localizes to the nucleus and associates with chromatin, underscoring its importance in epigenetic and transcriptional regulation.