Recombinant SPEE protein (His tag)

Catalog Number	544461
Synonyms	SPDSY; Putrescine aminopropyltransferase
Species	Human
Expression System	E. coli
Accession	P19623
Molecular Weight	Predictes a molecular mass of 35.48 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 35 kDa band.

Product Information

Sequence Region	1-302
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 1-302 aa (P19623) 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 Spermidine Synthase (SPDSY) Fragment (1-302) is a high-purity protein designed for studying polyamine biosynthesis. This fragment fully encompasses the functional PABS domain, making it an ideal tool for investigating spermidine production mechanisms and enzyme activity in controlled experimental settings. Spermidine synthase (SPDSY), encoded by the SRM gene in Homo sapiens, catalyzes the conversion of putrescine and decarboxylated S-adenosylmethionine (dcSAM) into spermidine. The enzyme demonstrates strong substrate preference for putrescine, with minimal activity toward 1,3-diaminopropane or spermidine. This reaction is critical in polyamine metabolism, which plays essential roles in cell growth, proliferation, and differentiation. The recombinant fragment (residues 1-302) retains key functional domains, enabling focused research on spermidine synthesis without interference from non-essential regions of the full-length protein.