Recombinant SPSY protein (His tag)

Catalog Number	540042
Synonyms	SPMSY; Spermidine aminopropyltransferase
Species	Human
Expression System	E. coli
Accession	P52788
Molecular Weight	Predictes a molecular mass of 42.79 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 47 kDa band.

Product Information

Sequence Region	2-366
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>85%, 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 2-366 aa (P52788) 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	This recombinant protein product features a fragment of human Spermine Synthase (SPMSY), encompassing amino acids 2-366. It includes key functional domains essential for studying the enzyme's role in catalyzing spermine production from spermidine and decarboxylated S-adenosylmethionine, making it an ideal tool for targeted biochemical and functional research. Spermine Synthase (SPMSY), encoded by the SMS gene in Homo sapiens, is a critical enzyme that catalyzes the production of spermine from spermidine and decarboxylated S-adenosylmethionine (dcSAM). This reaction is part of the polyamine biosynthesis pathway, which plays a vital role in cellular processes such as proliferation, differentiation, and apoptosis. The enzyme's function is supported by multiple scientific references, highlighting its importance in metabolic and regulatory studies. While subcellular localization details are not provided, the focus remains on its catalytic activity and relevance in life science research.