Recombinant SAMTR protein (His tag)

Catalog Number	532422
Synonyms	dSamtor; Probable methyltransferase BMT2 homolog
Species	Drosophila melanogaster
Expression System	E. coli
Accession	Q9W138
Gene ID	37934
Molecular Weight	Predictes a molecular mass of 36.48 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 38 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 (Q9W138) 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 product is a recombinant fragment of the Drosophila melanogaster S-adenosylmethionine sensor upstream of mTORC1 (dSamtor), encompassing residues 1-302. It represents a stable and soluble unit ideal for structural studies and biochemical assays investigating SAM-binding and potential methyltransferase activity. The full-length Samtor protein functions as an S-adenosyl-L-methionine (SAM)-binding protein, with evidence suggesting its role in signaling methionine sufficiency to the mTORC1 complex, although this function remains under investigation. It is also proposed to act as a SAM-dependent methyltransferase (EC 2.1.1.-), implicating it in epigenetic or metabolic regulation pathways. Research indicates its involvement in cellular sensing mechanisms linked to nutrient availability, particularly methionine metabolism.