Recombinant SIM protein (His tag)

Catalog Number	533140
Species	Drosophila melanogaster
Expression System	E. coli
Accession	P05709
Gene ID	41612
Molecular Weight	Predictes a molecular mass of 27.80 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 28 kDa band.

Product Information

Sequence Region	199-434
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>87%, 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 199-434 aa (P05709) 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 Protein single-minded (sim) fragment (aa 199-434) is a high-purity, functional protein designed for studying the PAS 2 domain. This fragment serves as an essential tool for researchers investigating developmental regulation, midline neural patterning, and synapse development in Drosophila models. Protein single-minded is a key transcription factor in Drosophila melanogaster that acts as a master developmental regulator controlling midline development of the ventral nerve cord. It is required for proper formation of the central brain complex governing walking behavior, correct patterning of the embryonic genital disk and anal pad anlage, and plays a crucial role in synapse development. The protein localizes to the nucleus, consistent with its function as a transcription factor. The included PAS 2 domain (aa 266-336) within this recombinant fragment represents a critical functional region for studying specific domain-mediated activities.