Recombinant GUS protein (His tag)

Catalog Number	532452
Species	Drosophila melanogaster
Expression System	E. coli
Accession	A1Z6E0
Gene ID	35478
Molecular Weight	Predictes a molecular mass of 33.37 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 33 kDa band.

Product Information

Sequence Region	1-279
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 1-279 aa (A1Z6E0) 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 gustavus (Fragment 1-279) is a high-purity, functional protein derived from Drosophila melanogaster, encompassing the complete B30.2/SPRY and SOCS box domains. This fragment is an essential tool for investigating germ line development, primordial germ cell formation, and subcellular localization mechanisms in oocytes. Protein gustavus, encoded by the gus gene, plays a critical role in the localization of vas to the posterior pole of the oocyte and is maternally required in the germ line for efficient primordial germ cell formation. It localizes to both the cytoplasm and nucleus, forming part of cytoplasmic ribonucleoprotein (RNP) bodies that concentrate in perinuclear regions and as punctate aggregates throughout the cytoplasm. During oocyte development, it accumulates in the anterior cytoplasm at stage 7 and shifts to the posterior pole by stage 10, highlighting its dynamic involvement in early developmental processes.