Recombinant GSTD5 protein (His tag)

Catalog Number	534233
Species	Drosophila melanogaster
Expression System	E. coli
Accession	Q9VG95
Gene ID	48338
Molecular Weight	Predictes a molecular mass of 26.37 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 27 kDa band.

Product Information

Sequence Region	1-216
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, 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 1-216 aa (Q9VG95) 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 Glutathione S-transferase D5 (EC 2.5.1.18) fragment (residues 1-216) from Drosophila melanogaster, encompassing the full GST N-terminal and C-terminal domains. This high-purity protein is an essential tool for investigating glutathione conjugation mechanisms and detoxification pathways in biochemical and toxicological studies. Glutathione S-transferase D5 (GstD5) is a key enzyme in Drosophila melanogaster that catalyzes the conjugation of reduced glutathione to diverse hydrophobic electrophiles, facilitating the detoxification of both exogenous and endogenous compounds. This activity, supported by experimental evidence (PubMed:22082028), underscores its critical role in cellular defense against electrophilic stressors. The recombinant fragment (1-216) retains the complete functional domains necessary for studying substrate specificity and catalytic mechanisms in controlled experimental settings.