Recombinant STAT protein (His tag)

Catalog Number	531113
Synonyms	d-STAT; Protein marelle
Species	Drosophila melanogaster
Expression System	E. coli
Accession	Q24151
Gene ID	42428
Molecular Weight	Predictes a molecular mass of 15.43 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 16 kDa band.

Product Information

Sequence Region	1-118
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 1-118 aa (Q24151) 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 Signal transducer and transcription activator (d-STAT) fragment (amino acids 1-118) from Drosophila melanogaster, engineered for stability and solubility to support structural and biochemical studies of this key developmental regulator. The full-length Signal transducer and transcription activator (d-STAT), also known as Protein marelle and encoded by the Stat92E gene, functions in signal transduction and transcriptional activation within the Janus kinase-STAT pathway. It is essential for segmental pattern formation in early embryos by activating specific stripes of pair-rule gene expression and has a demonstrated role in male germline stem cell maintenance. The protein localizes to both the cytoplasm and nucleus, with nuclear translocation occurring upon phosphorylation, highlighting its dynamic regulatory mechanism in developmental processes.