Recombinant TRA2 protein (His tag)

Catalog Number	531516
Species	Drosophila melanogaster
Expression System	E. coli
Accession	P19018
Gene ID	36619
Molecular Weight	Predictes a molecular mass of 12.80 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 13 kDa band.

Product Information

Sequence Region	80-175
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, 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 80-175 aa (P19018) 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 recombinant protein is a fragment of the Transformer-2 sex-determining protein (tra2) from Drosophila melanogaster, encompassing amino acids 80-175. It includes the complete RRM domain, making it an ideal tool for investigating RNA binding and splicing regulation mechanisms in sex determination and germ cell development. The full-length Transformer-2 sex-determining protein is essential for female sex determination in somatic cells and spermatogenesis in male germ cells. It functions as a positive regulator of female-specific splicing and polyadenylation of doublesex (dsx) pre-mRNA, achieved through cooperative interactions with other proteins like tra and sr proteins at the dsx repeat element (dsxRE). Additionally, tra2 collaborates with tra-2 to switch fruitless (fru) splicing from male-specific to female-specific patterns by activating the female-specific 5'-splice site. These roles highlight its critical involvement in alternative splicing regulation and developmental processes, supported by evidence from multiple studies (e.g., PubMed:2116360, PubMed:2120049).