Recombinant E2F2 protein (His tag)

Catalog Number	533129
Synonyms	dE2F2; E2F transcription factor 2; E2F-like transcription factor E2F2
Species	Drosophila melanogaster
Expression System	E. coli
Accession	O77051
Gene ID	35381
Molecular Weight	Predictes a molecular mass of 21.01 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 23 kDa band.

Product Information

Sequence Region	77-244
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 77-244 aa (O77051) 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 product is a recombinant fragment of the Transcription factor E2F2 (dE2F2) from Drosophila melanogaster, encompassing amino acids 77-244. This stable and soluble fragment is ideal for structural studies and biochemical assays, offering researchers a reliable tool to investigate E2F2's role as a transcriptional repressor in cell cycle regulation and differentiation. Transcription factor E2F2 (dE2F2) is a key transcriptional repressor that binds to E2F sites and suppresses E2F-regulated target genes, requiring interaction with transcription factor Dp for DNA binding. It functions synergistically with Rbf2 to counteract E2f1-mediated transcriptional activation and is a component of the DREAM complex, which acts as a context-dependent transcriptional activator or repressor. The DREAM complex recruits E2f2 to differentiation-specific promoters and stabilizes E2f2-Rbf complexes during S phase, repressing developmentally controlled E2F target genes. E2f2 plays roles in restricting DNA synthesis during oogenesis, inhibiting ionizing radiation-induced p53-independent apoptosis, and facilitating cell cycle exit by modulating CycE-dependent E2F transcription. The protein is localized to the nucleus, as confirmed by experimental evidence.