Recombinant TC3A protein (His tag)

Catalog Number	534740
Species	Caenorhabditis elegans
Expression System	E. coli
Accession	P34257
Molecular Weight	Predictes a molecular mass of 39.91 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 40 kDa band.

Product Information

Sequence Region	1-329
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 1-329 aa (P34257) 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 Transposable element Tc3 transposase (residues 1-329) from Caenorhabditis elegans is a high-purity, stable fragment designed for structural and biochemical studies. This 329-amino acid construct retains key functional regions, enabling research into DNA transposition mechanisms and genome engineering applications. The full-length Tc3 transposase protein binds specifically to terminal nucleotides of TC3 inverted repeats and catalyzes double-strand DNA breaks at TC3 element ends. This activity facilitates excision and transposition of endogenous TC3 elements, followed by insertion into target sequences, playing a crucial role in DNA rearrangement processes. The protein localizes to the nucleus, where it executes its transposition functions, as documented in scientific literature (ECO:0000269|PubMed:8389698).