Recombinant HECD1 protein (His tag)

Catalog Number	533022
Species	Caenorhabditis elegans
Expression System	E. coli
Accession	V6CLA2
Gene ID	177486
Molecular Weight	Predictes a molecular mass of 50.61 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 55 kDa band.

Product Information

Sequence Region	2216-2648
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>86%, 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 2216-2648 aa (V6CLA2) 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 E3 ubiquitin-protein ligase hecd-1 fragment (amino acids 2216-2648) from Caenorhabditis elegans, encompassing the complete HECT domain. This high-purity protein fragment serves as an essential tool for studying ubiquitin transfer mechanisms and E3 ligase function in targeted protein degradation pathways. The full-length E3 ubiquitin-protein ligase hecd-1 (UniProt ID: V6CLA2) functions as a critical enzyme in the ubiquitin-proteasome system, accepting ubiquitin from E2 conjugating enzymes and directly transferring it to substrate proteins. This protein plays multifaceted roles in cellular regulation, including mediating the degradation of cytoplasmic and mitochondrial proteins, regulating cell fate decisions in the anchor cell/vulval precursor system, controlling germline proliferation, facilitating DNA double-strand-break repair and apoptosis in response to DNA damage, and potentially contributing to fibrous organelle formation. Its involvement in these diverse biological processes underscores its importance as a key regulatory component in protein homeostasis and cellular signaling pathways.