Recombinant DRONC protein (His tag)

Catalog Number	533019
Synonyms	Death regulator NEDD2-like caspase
Species	Drosophila melanogaster
Expression System	E. coli
Accession	Q9XYF4
Gene ID	39173
Molecular Weight	Predictes a molecular mass of 20.35 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 20 kDa band.

Product Information

Sequence Region	156-320
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 156-320 aa (Q9XYF4) 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 Caspase Dronc (EC 3.4.22.62) fragment (residues 156-320) from Drosophila melanogaster, a stable and soluble unit optimized for structural and biochemical studies of apoptosis regulation. Caspase Dronc is a key initiator caspase in Drosophila melanogaster, essential for the activation cascade of caspases during apoptosis execution. It functions as an effector of steroid-mediated apoptosis in insect metamorphosis and promotes programmed cell death when overexpressed. The protein's activity is regulated through interaction with Diap1, which suppresses Dronc-mediated cell death via ubiquitination, and it serves as the rate-limiting caspase in the rpr, grim, and hid death pathways. Dronc is recruited to the Dark apoptosome, where its association stimulates autocatalytic cleavage and activation, enabling cleavage of downstream effector caspases like Drice. It is localized in the cytoplasm, playing a central role in the intrinsic apoptosis pathway.