Recombinant SODE protein (His tag)

Catalog Number	532800
Species	Drosophila melanogaster
Expression System	E. coli
Accession	Q7JR71
Gene ID	36232
Molecular Weight	Predictes a molecular mass of 18.98 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 19 kDa band.

Product Information

Sequence Region	19-181
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 19-181 aa (Q7JR71) 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 Extracellular Superoxide Dismutase [Cu-Zn] (EC 1.15.1.1) Fragment (residues 19-181) from Drosophila melanogaster. This 163-amino acid fragment is engineered for stability and solubility, enabling robust structural and biochemical studies of antioxidant function. Extracellular superoxide dismutase [Cu-Zn] protects the extracellular space from reactive oxygen intermediates by catalyzing the conversion of superoxide radicals into hydrogen peroxide and oxygen, as supported by experimental evidence (PubMed:21635891, 25339624). The full-length protein is secreted, localizing its antioxidant activity to extracellular environments. This recombinant fragment encompasses the functional domain (residues 19-181), providing a soluble and stable unit for investigating oxidative stress mechanisms in research applications.