Recombinant RNLS protein (His tag)

Catalog Number	547464
Synonyms	Monoamine oxidase-C; MAO-C
Species	Human
Expression System	E. coli
Accession	Q5VYX0
Molecular Weight	Predictes a molecular mass of 37.90 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 38 kDa band.

Product Information

Sequence Region	18-342
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>90%, 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 18-342 aa (Q5VYX0) 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 Human Renalase (EC 1.6.3.5), also known as Monoamine oxidase-C (MAO-C), is a high-purity protein fragment (residues 18-342) designed for robust structural and biochemical studies. This soluble and stable construct retains key functional domains, enabling research into its role in catecholamine metabolism and cardiovascular regulation. Renalase is a secreted enzyme encoded by the RNLS gene in humans, functioning as a monoamine oxidase that catalyzes the oxidation of 1,2-dihydro-beta-NAD(P) and 1,6-dihydro-beta-NAD(P) to form beta-NAD(P)+. As a hormone secreted by the kidney, it circulates in the blood and modulates cardiac function and systemic blood pressure by reducing cardiac contractility and heart rate while preventing compensatory increases in peripheral vascular tone. Its activity is linked to plasma catecholamine levels, with high catecholamine concentrations promoting renalase activation, secretion, and synthesis, underscoring its significance in cardiovascular risk and hypertension pathways. The protein is naturally secreted into the extracellular space, as indicated by its subcellular localization.