Recombinant SOX protein (His tag)

Catalog Number	546133
Synonyms	PSO; L-pipecolate oxidase; L-pipecolic acid oxidase
Species	Human
Expression System	E. coli
Accession	Q9P0Z9
Molecular Weight	Predictes a molecular mass of 45.73 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 46 kDa band.

Product Information

Sequence Region	1-390
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 1-390 aa (Q9P0Z9) 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 Peroxisomal Sarcosine Oxidase (PSO) Fragment (1-390) - A high-quality, stable protein fragment ideal for structural studies and enzymatic characterization of this key peroxisomal enzyme involved in amino acid metabolism. Peroxisomal sarcosine oxidase (PSO), encoded by the PIPOX gene, functions as a dual-activity enzyme that metabolizes both sarcosine and L-pipecolic acid, playing a crucial role in amino acid catabolism. This enzyme is localized specifically within peroxisomes, specialized organelles involved in various metabolic processes including fatty acid oxidation and reactive oxygen species metabolism. The enzyme's ability to process both sarcosine (an intermediate in glycine metabolism) and L-pipecolate (a lysine degradation product) highlights its importance in multiple metabolic pathways. The recombinant fragment provided represents the complete functional unit of the protein, maintaining structural integrity for research applications.