Recombinant SDSL protein (His tag)

Catalog Number	545681
Synonyms	Cancerous serine dehydratase; cSDH; Glutamate racemase; L-serine deaminase; L-serine dehydratase/L-threonine deaminase; SDHL; L-threonine dehydratase; TDH; Serine dehydratase 2; SDH 2
Species	Human
Expression System	E. coli
Accession	Q96GA7
Molecular Weight	Predictes a molecular mass of 36.33 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 36 kDa band.

Product Information

Sequence Region	1-329
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, 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 1-329 aa (Q96GA7) 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 Serine Dehydratase-like (SDSL) Fragment (1-329) is a high-purity, soluble protein fragment designed for structural and biochemical studies. This fragment retains key catalytic domains and is optimized for stability, supporting research into its dual enzymatic activities in amino acid metabolism. The full-length Serine Dehydratase-like protein (SDSL) is a multifunctional enzyme that catalyzes the pyridoxal-phosphate-dependent dehydrative deamination of L-threonine and L-serine to produce ammonia and alpha-ketobutyrate or pyruvate, respectively. Additionally, it exhibits racemase activity, interconverting L-glutamate and D-glutamate. These functions highlight its role in amino acid metabolism and potential implications in cellular processes, as evidenced by studies (PubMed:16580895, PubMed:18342636). The subcellular localization of the full-length protein is not specified in the provided data.