Recombinant AT2L2 protein (His tag)

Catalog Number	547673
Synonyms	Alanine--glyoxylate aminotransferase 2-like 2
Species	Human
Expression System	E. coli
Accession	Q8IUZ5
Molecular Weight	Predictes a molecular mass of 51.37 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 51 kDa band.

Product Information

Sequence Region	1-450
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 1-450 aa (Q8IUZ5) 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	This product is a recombinant fragment of human 5-phosphohydroxy-L-lysine phospho-lyase (EC 4.2.3.134), also known as Alanine--glyoxylate aminotransferase 2-like 2, encoded by the PHYKPL gene. The fragment spans residues 1-450 and is designed for structural and biochemical studies, offering a stable and soluble unit ideal for research applications. The full-length 5-phosphohydroxy-L-lysine phospho-lyase is a pyridoxal-phosphate-dependent enzyme that catalyzes the breakdown of 5-phosphohydroxy-L-lysine into ammonia, inorganic phosphate, and 2-aminoadipate semialdehyde, as supported by experimental evidence (PubMed:22241472). This enzyme is localized to the mitochondrion, where it plays a critical role in metabolic pathways. The provided fragment encompasses the entire functional domain (residues 1-450), enabling detailed investigation into its catalytic mechanisms and structural features without compromising relevance to the native protein's activity.