

Recombinant E.coli Tryptophan Synthase Protein (His Tag)

Catalog Number: PKSQ050057

Note: Centrifuge before opening to ensure complete recovery of vial contents.

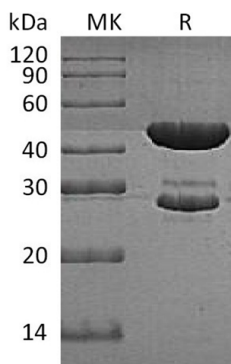
Description

Species	E.coli
Source	E.coli-derived E.coli Tryptophan Synthase protein Met1-Ser268&Thr2-Ile397, with an N-terminal His
Mol_Mass	28.7&43.8 kDa
Accession	P0A877&P0A879
Bio-activity	Not validated for activity

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.
Shipping	This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at < - 20°C.
Formulation	Supplied as a 0.2 µm filtered solution of PBS, pH7.4.
Reconstitution	Not Applicable

Data



> 95 % as determined by reducing SDS-PAGE.

Background

Tryptophan synthase is a multienzyme $\alpha\beta\beta'$ complex composed of two protein subunit. Tryptophan synthase catalyzes the last two steps in the synthesis of L-tryptophan (L-Trp). The α -subunit catalyzes cleavage of 3-indole-d-glycerol 3'-phosphate (IGP) to give indole and D-glyceraldehyde 3'-phosphate (G3P). Indole is then transferred through a 25-hydrophobic tunnel to the β -subunit. The β 2 subunit contains pyridoxal 5'-phosphate and catalyzes several pyridoxal 5'-phosphate-dependent reactions, including/3-elimination reactions 6 and a thiol-dependent transamination reaction. This enzyme is commonly found in Eubacteria, Archaeobacteria, Protista, Fungi, and Plantae, but is absent from Animalia. As humans do not have tryptophan synthase, this enzyme has been explored as a potential drug target.

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