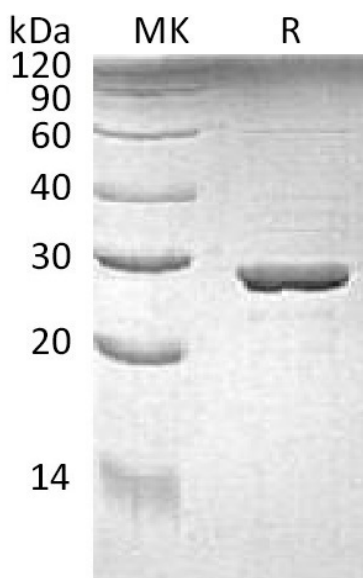


Summary

Name	Tryptophan Synthase α chain/Trp A
Purity	Greater than 95% as determined by reducing SDS-PAGE
Endotoxin level	<1 EU/ μ g as determined by LAL test.
Construction	Recombinant E.coli Tryptophan Synthase Alpha Chain is produced by our E.coli expression system and the target gene encoding Met1-Ser268 is expressed.
Accession #	P0A877
Host	E.coli
Species	E.coli
Predicted Molecular Mass	28.7 KDa
Formulation	Lyophilized from a 0.2 μ m filtered solution of PBS, pH 7.4.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.
Stability&Storage	Store at $\leq -70^{\circ}\text{C}$, stable for 6 months after receipt. Store at $\leq -70^{\circ}\text{C}$, stable for 3 months under sterile conditions after opening. Please minimize freeze-thaw cycles.
Reconstitution	Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100 μ g/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

SDS-PAGE image

Product Name: Recombinant E.coli Trp A
Catalog #: PEV1736



Alternative Names

Tryptophan synthase alpha chain; trpA;

Background

Tryptophan synthase is an enzyme that catalyzes the final two steps in the biosynthesis of tryptophan. It is commonly found in Eubacteria, Archaeobacteria, Protista, Fungi, and Plantae, but is absent from animals such as humans. Tryptophan synthase typically exists as an α - $\beta\beta$ - α complex. The alpha subunit is responsible for the aldol cleavage of indoleglycerol phosphate to indole and glyceraldehyde 3-phosphate: $\text{L-serine} + 1\text{-C-(indol-3-yl)glycerol 3-phosphate} = \text{L-tryptophan} + \text{D-glyceraldehyde 3-phosphate} + \text{H}_2\text{O}$. The beta subunits catalyze the irreversible condensation of indole and serine to form tryptophan in a pyridoxal phosphate (PLP) dependent reaction. Their assembly into a complex leads to structural changes in both subunits resulting in reciprocal activation.

Note

For Research Use Only , Not for Diagnostic Use.