

32-8698: Recombinant E. coli Tryptophan Synthase beta Chain/Trp B

Gene : trpB
Gene ID : 945768
Uniprot ID : P0A879

Description

Source: E.coli.
MW :43.8kD.

Recombinant E.coli Tryptophan synthase beta chain is produced by our E.coli expression system and the target gene encoding Thr2-Ile397 is expressed with a 6His tag at the N-terminus. 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 β - α complex. The alpha subunit is responsible for the aldol cleavage of indoleglycerol phosphate to indole and glyceraldehyde 3-phosphate: L-serine + 1-C-(indol-3-yl)glycerol 3-phosphate = L-tryptophan + D-glyceraldehyde 3-phosphate + H₂O. 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.

Product Info

Amount : 10 µg / 50 µg
Content : Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4.
Storage condition : Lyophilized protein should be stored at -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at -20°C for 3 months.
Amino Acid : MHHHHHHTLLNPYFGEFGMYVPQILMPALRQLEEFVSAQKDPEFQAQFNDLLKNYAGRPTALTKCQNITAGTNTTLYLKREDLLHGGAHKTNQVLGQALLAKRMGKTEIIAETGAGQHGVASALASALLGLKCRIYMGAKDVERQSPNVFRMLMGAIEVIPVHSGSATLKDACNEALRDWSGSYETAHYMLGTAAGPHPYPTIVREFQRMIGEETKQILEREGRLPDAVIACVGGGSNAIGMFADFINETNVGLIGVEPGGHGIETGEHGAPLKHGRVGIYFGMKAPMMQTEDGQIEESYSISAGLDFPSVGPQHAYLNSTGRADYVSITDDEALEAFKTLCLHEGIIPALESSHALAHALKMMRENPDKQEQLLVNLSGRGDKDIFTVHDILKARGEI

Application Note

Endotoxin : Less than 0.1 ng/µg (1 IEU/µg) as determined by LAL test.