

32-8697: Recombinant E. coli Tryptophan Synthase α Chain/Trp A

Gene : trpA
Gene ID : 946204
Uniprot ID : P0A877

Description

Source: E.coli.
MW :28.7kD.

Recombinant E.coli Tryptophan synthase α chain is produced by our E.coli expression system and the target gene encoding Met1-Ser268 is expressed. 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 - β complex. The α 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 β 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 μ g / 50 μ g
Content : Lyophilized from a 0.2 μ m 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 : MERYESLFAQLKERKEGAFVPFVTLGDPGIEQSLKIIDLIEAGADALELGIPFSDPLADGPTIQNATLRAFAAGVT
PAQCFEMLALIRQKHPTIPIGLLMYANLVFNKGIDEFYAQCEKVGVDVSVLVADVPEESAPFRQAALRHNVAPIFI
CPPNADDDLLRQIASYGRGYTYLLSRAGVTGAENRAALPLNHLVAKLKEYNAAPPLQGFGISAPDQVKAAIDAG
AAGAISGSAIVKIIHQHINEPEKMLAALKVFVQPMKAATRS

Application Note

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