

32-8742: Recombinant E. coli Tryptophan Synthase (N-6His)

Gene : trpA
Gene ID : 946204
Uniprot ID : P0A877

Description

Source: E. coli.
MW :72.5kD.

Recombinant E.coli Tryptophan synthase is produced by our E.coli expression system and the target gene encoding Met1-Ser268&Thr2-Ile397 is expressed with a 6His tag at the N-terminus. Tryptophan synthase is a multienzyme $\alpha 2 \beta 2$ 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-Å... hydrophobic tunnel to the β -subunit. The $\beta 2$ 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.

Product Info

Amount : 10 µg / 50 µg
Content : Supplied as a 0.2 µm filtered solution of PBS, pH7.4.
Storage condition : Store at -20°C, stable for 6 months after receipt. Please minimize freeze-thaw cycles.
Amino Acid : MERYESLFAQLKERKEGAFVPFVTLGDPGIEQSLKIIDTLIEAGADALELGIPFSDPLADGPTIQNATLRAFAAGVT
PAQCFEMLALIRQKHPTIPIGLLMYANLVFNKGIDEFYAQCEKVGVDVSVLVADVPVEESAPFRQAALRHNVAIFI
CPPNADDDLLRQIASYGRGYTYLLSRAGVTGAENRAALPLNHLVAKLKEYNAAPLQGFGISAPDQVKAIDAG
AAGAISGSAIVKIIHQHINEPEKMLAALKVFVQPMKAATRS&MHHHHHHHTLLNPYFGEFGGMYVPQILMPALRQ
LEEFVSAQKDPEFQAQFNDLLKNYAGRPTALTCKQNTAGTNTTLYLKREDLLHGGAHKTNQVLGQALLAKR
MGKTEIIAETGAGQHGVASALASALLGLKCRIMYGAKDVERQSPNVFRMRLMGAIEVIVHSGSATLKDACNEA
LRDWSGSYETAHYMLGTAAGPHPYPTIVREFQRMIGEETKAQILEREGRLPDAVIACVGGGSNAIGMFADFINET
NVGLIGVEPGGHGIETGEHGAPLKHGRVGIYFGMKAPMMQTEDGQIEESYSISAGLDFPSVGPQHAYLNSTGR
ADYVSITDDEALEAFKTLCLHEGIIPALESSEHALAHALKMMRENPDKEQLLVNLSGRGDKDIFTVHDILKARGEI

Application Note

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