

Product datasheet for **TP727467**

Escherichia coli Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant E. coli Tryptophan Synthase (N-6His)
Species:	Escherichia coli
Expression cDNA Clone or AA Sequence:	Met1-Ser268&Thr2-Ile397
Tag:	N-His
Buffer:	Supplied as a 0.2 um filtered solution of PBS, pH 7.4.
Note:	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.
Stability:	12 months from date of despatch
Summary:	<p>Tryptophan synthase is a multienzyme $\hat{\pm}2\hat{2}$ complex composed of two protein subunit. Tryptophan synthase catalyzes the last two steps in the synthesis of L-tryptophan (L-Trp). The $\hat{\pm}$-subunit catalyzes cleavage of 3-indole-d-glycerol 3$\hat{\epsilon}^2$-phosphate (IGP) to give indole and D-glyceraldehyde 3$\hat{\epsilon}^2$-phosphate (G3P). Indole is then transferred through a 25-Å... hydrophobic tunnel to the $\hat{2}$-subunit. The $\hat{2}$ 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.</p>



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