

Datasheet for ABIN7317460

Tryptophan Hydroxylase 1 Protein (TPH1) (His tag)[Go to Product page](#)

Overview

Quantity:	50 µg
Target:	Tryptophan Hydroxylase 1 (TPH1)
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Purification tag / Conjugate:	This Tryptophan Hydroxylase 1 protein is labelled with His tag.

Product Details

Purpose:	Recombinant Human Tryptophan Hydroxylase 1/TPH1 Protein (His Tag)
Sequence:	Ile 2-Ile 444
Characteristics:	A DNA sequence encoding the human TPH1 (P17752-1) (Ile 2-Ile 444) was expressed, with a polyhistide tag at the N-terminus.
Purity:	> 95 % as determined by reducing SDS-PAGE.

Target Details

Target:	Tryptophan Hydroxylase 1 (TPH1)
Alternative Name:	Tryptophan Hydroxylase 1/TPH1 (TPH1 Products)
Background:	<p>Background: Tryptophan 5-hydroxylase 1, also known as Tryptophan 5-monoxygenase 1, Tryptophan hydroxylase 1, TPH1, TPH and TPRH, is an enzyme which belongs to the biopterin-dependent aromatic amino acid hydroxylase family. TPH1 contains one ACT domain.</p> <p>Tryptophan hydroxylase catalyzes the biopterin-dependent monooxygenation of tryptophan to</p>

Target Details

5-hydroxytryptophan (5HT), which is subsequently decarboxylated to form the neurotransmitter serotonin. It is the rate-limiting enzyme in the biosynthesis of serotonin. It is the rate-limiting enzyme in the biosynthesis of serotonin. TPH1 expression is limited to a few specialized tissues: raphe neurons, pinealocytes, mast cells, mononuclear leukocytes, beta-cells of the islets of Langerhans, and intestinal and pancreatic enterochromaffin cells. The tryptophan hydroxylase 1 (TPH1) gene is also reported to be associated with suicidal behavior. Polymorphisms of TPH1 may assist in identifying a subgroup of mood disorder patients that is at higher risk for suicidal behavior.

Synonym: TPRH;TRPH

Molecular Weight: 52.7 kDa

Pathways: [Feeding Behaviour](#)

Application Details

Restrictions: For Research Use only

Handling

Format: Lyophilized

Reconstitution: Please refer to the printed manual for detailed information.

Buffer: Lyophilized from sterile 20 mM Tris, 200 mM NaCl, 10 % glycerol, pH 8.0

Storage: 4 °C, -20 °C, -80 °C

Storage Comment: Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.