



Recombinant Protein Technical Manual

Recombinant Human TPH2 Protein (His Tag)

RPES1506

Product Data:

Product SKU: RPES1506

Size: 10µg

Species: Human

Expression host: E. coli

Uniprot: Q14CC5

Protein Information:

Molecular Mass: 58.8 kDa

AP Molecular Mass: 60 kDa

Tag: N-6His

Bio-activity:

Purity: > 95 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.

Shipping: This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at < -20°C.

Formulation: Supplied as a 0.2 µm filtered solution of 20mM PB, 150mM NaCl, pH7.4.

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

Application:

Synonyms: Tryptophan 5-Hydroxylase 2; Neuronal Tryptophan Hydroxylase; Tryptophan 5-Monooxygenase 2; TPH2; NTPH

Immunogen Information:

Sequence: Met 1-Ile496

Background:

Tryptophan 5-hydroxylase 2 (TPH2) is an isozyme member of the biopterin-dependent aromatic amino acid hydroxylase family. TPH2 is primarily expressed in the serotonergic neurons of the brain, with the highest expression found in the raphe nucleus of the midbrain. TPH2 catalyzes the first and rate limiting step in the biosynthesis of serotonin, an important hormone and neurotransmitter. Genetic variation in TPH2 may influence susceptibility to major depressive disorder (MDD). Defects in TPH2 are the cause of psychiatric diseases such as bipolar affective disorder and major depression.