

## 32-8228: Recombinant Human Tryptophan 5-Hydroxylase 2/TPH2 (N-6His)(Discontinued)

**Gene :** TPH2  
**Uniprot ID :** Q14CC5

### Description

Source: E. coli.  
MW :58.8kD.

Recombinant Human Tryptophan 5-Hydroxylase 2 is produced by our E.coli expression system and the target gene encoding Met1-Ile496 is expressed with a 6His tag at the N-terminus. Tryptophan 5-hydroxylase 2 (TPH2) is an isozyme member of the bipterin-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.

### Product Info

**Amount :** 10 µg / 50 µg  
**Content :** Supplied as a 0.2 µm filtered solution of 20mM PB,150mM NaCl,pH7.4.  
**Storage condition :** Store at -20°C, stable for 6 months after receipt. Please minimize freeze-thaw cycles.  
**Amino Acid :** MNHKVHHHHHHMQPAMMMFSSKYWARRGFSLDSAVPEEHQLLGSSTASTFLKLNKPNSGKNDDKGNKGSS  
KREAATESGKTAVVFLKNEVGGLVKALRLFQEKRVNMVHIESRKSRRRSSEVEIFVDCECGKTEFNELIQLLK  
QTTIVTLNPPENIWTEEELEDPWFPRKISELDKCSHRVLMYGSELDADHPGFKDNVYRQRRKYFVDVAMGY  
KYGQPIPRVEYTEEETKTWGVVFRELSKLYPTHACREYLKNFPLLTKYCGYREDNVPQLEDVSMFLKERSGFTVR  
PVAGYLSPRDFLAGLAYRVFHTQYIRHGSDPLYTPEPDTHELLGHVPLLADPKFAQFSQEIGLASLGASDEDV  
QKLATCYFFTIEFGLCKQEGQLRAYGAGLLSSIGELKHALSDKACVKAFDPKTTCLQECLITTFQEAYFVSESFEE  
AKEKMRDFAKSITRPFVSVYFNPYTQSIELKDTRSIENVVQDLRSDLNTVCDALNKMNQYLGIVDLQSR

### Application Note

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