



# Recombinant Rat Tryptophan 5-hydroxylase 2 (Tph2)

<b>Product Code</b>	CSB-EP807510RA
<b>Abbreviation</b>	Tph2
<b>Storage</b>	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
<b>Uniprot No.</b>	Q8CGU9
<b>Product Type</b>	Recombinant Protein
<b>Immunogen Species</b>	Rattus norvegicus (Rat)
<b>Purity</b>	>85% (SDS-PAGE)
<b>Sequence</b>	MQPAMMMFSS KYWARRGLSL DSAVPEEHQI LGGLTQNKAT ASKSEDKRSG KDTSESSKTA VVFLKNEVG GLVRALRLFQ EKHVNMLHIE SRRSRRRSSE VEIFVDCECG KTEFNELIQL LKFQTTIVTL NPPDNIWTEE EELEDVPWFP RKISELDRCS HRVLMYGTEL DADHPGFKDN VYRQRRKYFV DVAMGYKYGQ PIPRVEYTEE ETKTWGVVFR ELSKLYPTH CREYLKNFPL LTKYCGYRED NVPQLEDVSM FLKERSGFTV RPYAGYLSR DFLAGLAYRV FHCTQYVRHG SDPLYTPEPD TCHELLGHVP LLADPKFAQF SQEIGLASLG ASDEDVQKLA TCYFFTIEFG LCKQEGQLRA YGAGLLSSIG ELKHALSDKA CVKAFDPKTT CLQECLITTF QDAYFVSESF EEAKEKMRDF AKSITRPFSV YFNPYTSIE ILKDTRSIEN VVQDLRSDLN TVCDALNKMN QYLG I
<b>Source</b>	E.coli
<b>Target Names</b>	Tph2
<b>Protein Names</b>	Recommended name: Tryptophan 5-hydroxylase 2 EC= 1.14.16.4 Alternative name(s): Neuronal tryptophan hydroxylase Tryptophan 5-monoxygenase 2
<b>Expression Region</b>	1-485
<b>Notes</b>	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
<b>Tag Info</b>	Tag type will be determined during the manufacturing process.
<b>Protein Length</b>	full length protein
<b>Target Details</b>	This gene encodes a member of the pterin-dependent aromatic acid hydroxylase family. The encoded protein catalyzes the first and rate limiting step in the biosynthesis of serotonin, an important hormone and neurotransmitter. The human genome contains two related tryptophan hydroxylases, one on chromosome 11p15-p14 and one on chromosome 12q21. This gene is expressed predominantly in the brain stem. Mutations in this gene may be associated with psychiatric diseases such as bipolar affective disorder and major depression.



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**Reconstitution**

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

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