Rat Tryptophan 5-hydroxylase 2(TPH2) ELISA kit

Product Code	CSB-EL024101RA
Abbreviation	TPH2
Protein Biological Process 1	Neurobiology
Target Name	tryptophan hydroxylase 2
Uniprot No.	Q8CGU9
Alias	ADHD7, FLJ37295, MGC138871, MGC138872, NTPH, neuronal tryptophan hydroxylase|tryptophan 5-monooxygenase 2
Product Type	ELISA Kit
Immunogen Species	Rattus norvegicus (Rat)
Protein Biological Process 3	Serotonin biosynthesis
Sample Types	serum, plasma, tissue homogenates
Detection Range	31.25 pg/mL-2000 pg/mL
Sensitivity	7.8 pg/mL
Assay Time	1-5h
Sample Volume	50-100ul
Detection Wavelength	450 nm
Lead Time	3-5 working days after you place the order, and it takes another 3-5 days for delivery via DHL or FedEx.
Research Area	Neuroscience
Gene Names	Tph2
Tag Info	quantitative
Protein Description	Sandwich
Description	This Rat TPH2 ELISA Kit was designed for the quantitative measurement of Rat TPH2 protein in serum, plasma, tissue homogenates. It is a Sandwich ELISA kit, its detection range is 31.25 pg/mL-2000 pg/mL and the sensitivity is 7.8 pg/mL.
Target Details	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.

Product Precision

Intra-assay Precision (Precision within an assay): CV%<8%

Three samples of known concentration were tested twenty times on one plate to assess.

Inter-assay Precision (Precision between assays): CV%<10%

Three samples of known concentration were tested in twenty assays to assess.

Linearity

To assess the linearity of the assay, samples were spiked with high concentrations of rat TPH2 in various matrices and diluted with the Sample Diluent to produce samples with values within the dynamic range of the assay.

?	Sample	Serum(n=4)
1:1	Average %	96
	Range %	93-102
1:2	Average %	94
	Range %	87-98
1:4	Average %	102
	Range %	96-105
1:8	Average %	91
	Range %	87-95

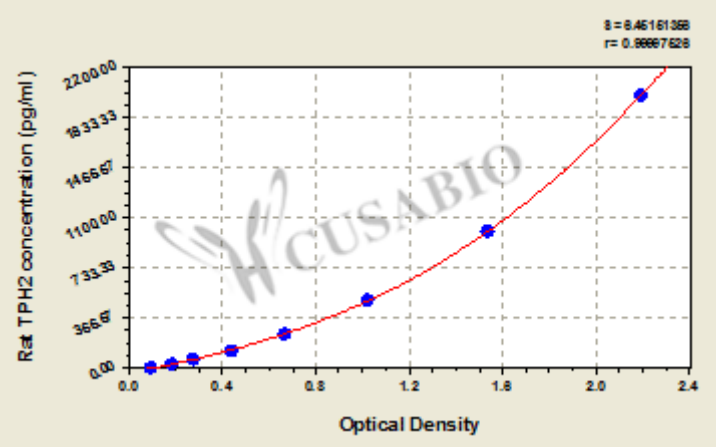
Recovery

The recovery of rat TPH2 spiked to levels throughout the range of the assay in various matrices was evaluated. Samples were diluted prior to assay as directed in the Sample Preparation section.

Sample Type	Average % Recovery	Range
Serum (n=5)	92	89-96
EDTA plasma (n=4)	97	90-102

Typical

These standard curves are provided for demonstration only. A standard curve should be generated for each set of samples assayed.



pg/ml	OD1	OD2	Average	Corrected
2000	2.123	2.262	2.193	2.092
1000	1.495	1.585	1.540	1.439
500	1.012	1.044	1.028	0.927
250	0.664	0.677	0.671	0.570
125	0.442	0.451	0.447	0.346
62.5	0.276	0.289	0.283	0.182
31.25	0.191	0.195	0.193	0.092
0	0.102	0.100	0.101	?

Msds

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