

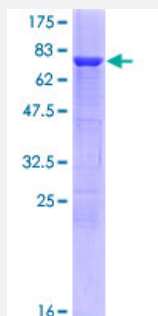
Full-Length

TPH1 (Human) Recombinant Protein (P01)

Catalog # H00007166-P01

Size 25 ug, 10 ug

Applications



Specification

Product Description

Human TPH1 full-length ORF (NP_004170.1, 1 a.a. - 444 a.a.) recombinant protein with GST-tag at N-terminal.

Sequence

MIEDNKENKDHSLERGRASLIFSLKNEVGGLIKALKIFQEKHVNLLHIESRKSRRNSEFEIFVDCDI
NREQLNDIFHLLKSHTNVLSVNLDPNFTLKEDGMETVPWFPPKISDLHDHCANRVLMYGSELDADH
PGFKDNVYRKRKYFADLAMNYKHGDPKPKVEFTEEEIKTWGTVFQELNKL YPTHACREYLKNLPL
LSKYCGYREDNIPQLEDVSNFLKERTGFSIRPVAGYLSPRDFLSGLAFRVFHCTQYVRHSSDPFYT
PEPDTCHELLGHVPLLAEPSFAQFSQEIGLASLGASEEAVQKLATCYFFTVEFGLCKQDQGLRVF
GAGLLSSISELKHALLSGHAKVKPFDPKITCKQECLITTFQDVYFVSESFEDAKEKMREFTKTIKRPF
GVKYNPYTRSIQILKDTKSITSAMNELQHDLDVVSDALAKVSRKPSI

Host

Wheat Germ (in vitro)

Theoretical MW (kDa)

77.4

Preparation Method

[in vitro wheat germ expression system](#)

Purification

Glutathione Sepharose 4 Fast Flow

Quality Control Testing

12.5% SDS-PAGE Stained with Coomassie Blue.

Storage Buffer

50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.

Storage Instruction

Store at -80°C. Aliquot to avoid repeated freezing and thawing.

Note

Best use within three months from the date of receipt of this protein.

Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

Gene Info — TPH1

Entrez GeneID [7166](#)**GeneBank Accession#** [NM_004179.1](#)**Protein Accession#** [NP_004170.1](#)**Gene Name** TPH1**Gene Alias** MGC119994, TPH, TPRH**Gene Description** tryptophan hydroxylase 1**Omim ID** [191060](#)**Gene Ontology** [Hyperlink](#)

Gene Summary This gene encodes a member of the aromatic amino acid hydroxylase family. The encoded protein catalyzes the first and rate limiting step in the biosynthesis of serotonin, an important hormone and neurotransmitter. Mutations in this gene have been associated with an elevated risk for a variety of diseases and disorders, including schizophrenia, somatic anxiety, anger-related traits, bipolar disorder, suicidal behavior, addictions, and others

Other Designations indoleacetic acid-5-hydroxylase|tryptophan 5-hydroxylase|tryptophan 5-monooxygenase|tryptophan hydroxylase (tryptophan 5-monooxygenase)

Pathway

- [Biosynthesis of alkaloids derived from shikimate pathway](#)

- [Metabolic pathways](#)
- [Tryptophan metabolism](#)

Disease

- [Abortion](#)
- [Acute Disease](#)
- [Adolescent Psychology](#)
- [Alcoholism](#)
- [Alzheimer disease](#)
- [Anorexia Nervosa](#)
- [Antisocial Personality Disorder](#)
- [Anxiety Disorders](#)
- [Aptitude](#)
- [Attention Deficit Disorder with Hyperactivity](#)
- [Autistic Disorder](#)
- [Avoidance Learning](#)
- [Bipolar Disorder](#)
- [Borderline Personality Disorder](#)
- [Bulimia](#)
- [Bulimia Nervosa](#)
- [Cardiovascular Diseases](#)
- [Chromosome Aberrations](#)
- [Chromosome Disorders](#)
- [Conduct Disorder](#)
- [Creativeness](#)
- [Decision Making](#)

- [Depression](#)
- [Depressive Disorder](#)
- [Diabetes Mellitus](#)
- [Disease Models](#)
- [Disease Progression](#)
- [Disease Susceptibility](#)
- [Diseases in Twins](#)
- [Dyskinesia](#)
- [Edema](#)
- [Electroconvulsive Therapy](#)
- [Epilepsy](#)
- [Functional Laterality](#)
- [Gambling](#)
- [Genetic Predisposition to Disease](#)
- [Genetics](#)
- [Heroin Dependence](#)
- [Hypertension](#)
- [Learning Disorders](#)
- [Liver Cirrhosis](#)
- [Mental Disorders](#)
- [Migraine Disorders](#)
- [Mood Disorders](#)
- [Narcolepsy](#)
- [Nausea](#)
- [Neuropsychological Tests](#)
- [Obesity](#)

- [Obsessive-Compulsive Disorder](#)
- [Ovarian Failure](#)
- [Panic Disorder](#)
- [Personality Assessment](#)
- [Personality Disorders](#)
- [Personality Tests](#)
- [Polycystic Ovary Syndrome](#)
- [Premenstrual Syndrome](#)
- [Prenatal Exposure Delayed Effects](#)
- [Psychiatric Status Rating Scales](#)
- [Psychological Tests](#)
- [Psychomotor Agitation](#)
- [Psychotic Disorders](#)
- [Puberty](#)
- [Recurrence](#)
- [Schizophrenia](#)
- [Schizophrenic Psychology](#)
- [Scoliosis](#)
- [Somatoform Disorders](#)
- [Stress](#)
- [Substance Withdrawal Syndrome](#)
- [Temporomandibular Joint Disorders](#)
- [Thrombophilia](#)
- [Tobacco Use Disorder](#)
- [Weight Gain](#)