

Product datasheet for **TA321072**

GTP cyclohydrolase 1 (GCH1) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	ELISA: 1:1000-2000, WB: 1:200-1000, IHC: 1:5-20
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	Synthetic peptide corresponding to a region derived from 51-64 amino acids of human GTP cyclohydrolase 1
Formulation:	PBS pH7.3, 0.05% NaN ₃ , 50% glycerol
Concentration:	lot specific
Purification:	Antigen affinity purification
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	28 kDa
Gene Name:	GTP cyclohydrolase 1
Database Link:	NP_000152 Entrez Gene 14528 Mouse Entrez Gene 29244 Rat Entrez Gene 2643 Human P30793
Background:	This gene encodes a member of the GTP cyclohydrolase family. The encoded protein is the first and rate-limiting enzyme in tetrahydrobiopterin (BH ₄) biosynthesis; catalyzing the conversion of GTP into 7,8-dihydroneopterin triphosphate. BH ₄ is an essential cofactor required by aromatic amino acid hydroxylases as well as nitric oxide synthases. Mutations in this gene are associated with malignant hyperphenylalaninemia and dopa-responsive dystonia. Several alternatively spliced transcript variants encoding different isoforms have been described; however; not all variants give rise to a functional enzyme.
Synonyms:	DYT5; DYT5a; DYT14; GCH; GTP-CH-1; GTPCH1; HPABH4B

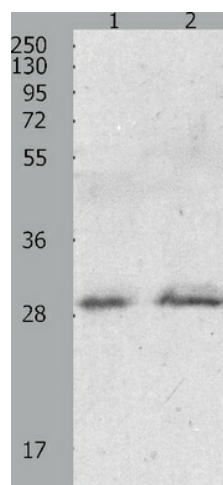


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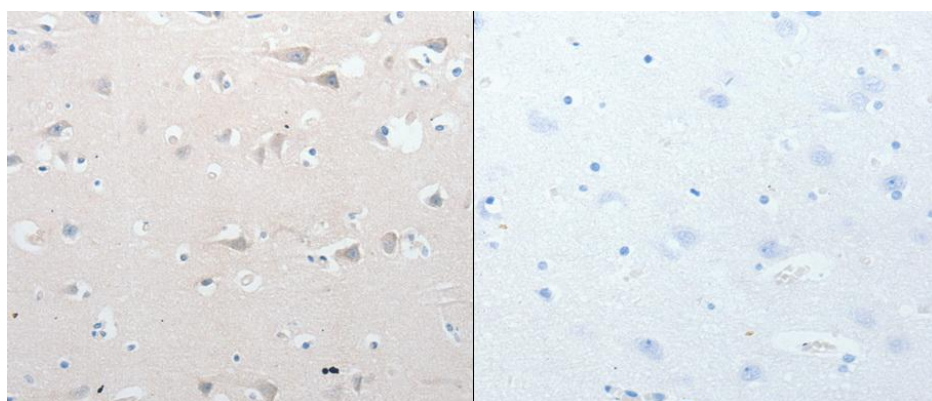
Protein Families: Druggable Genome

Protein Pathways: Folate biosynthesis, Metabolic pathways

Product images:



Predicted band size: 28 kDa. Positive control: Human fetal liver tissue and Hela cell lysate. Recommended dilution: 1/200-1000



Predicted cell location: Cytoplasm. Positive control: Human brain tissue. Recommended dilution: 1/5-20 The image on the left is immunohistochemistry of paraffin-embedded Human brain tissue using GCH1 antibody at dilution 1/15, on the right is treated with the synthetic peptide. (Original magnification: x200)