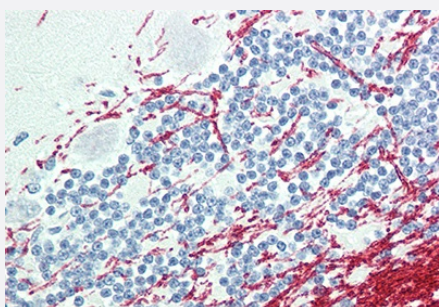


GCH1 polyclonal antibody

Catalog # PAB11532 Size 100 ug

Applications



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

GCH1 polyclonal antibody (Cat # PAB11532) (5 ug/mL) staining of paraffin embedded Human Cerebellum. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.

Specification

Product Description	Goat polyclonal antibody raised against synthetic peptide of GCH1.
Immunogen	A synthetic peptide corresponding to internal region of human GCH1.
Sequence	C-GKVHIGYLPNKQ
Host	Goat
Theoretical MW (kDa)	27.9
Reactivity	Human
Specificity	This antibody is expected to recognize all four isoforms (NP_000152.1 ; NP_001019195.1 ; NP_001019241.1 ; NP_001019242.1).
Form	Liquid
Purification	Antigen affinity purification
Concentration	0.5 mg/mL

Recommend Usage	ELISA (1:16000) Immunohistochemistry (5 ug/mL) The optimal working dilution should be determined by the end user.
Storage Buffer	In Tris saline, pH 7.3 (0.5% BSA, 0.02% sodium azide)
Storage Instruction	Store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

GCH1 polyclonal antibody (Cat # PAB11532) (5 ug/mL) staining of paraffin embedded Human Cerebellum. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.

- Enzyme-linked Immunoabsorbent Assay

Gene Info — GCH1

Entrez GeneID	2643
Protein Accession#	NP_000152.1;NP_001019195.1;NP_001019241.1;NP_001019242.1
Gene Name	GCH1
Gene Alias	DYT14, DYT5, GCH, GTP-CH-1, GTPCH1
Gene Description	GTP cyclohydrolase 1
Omim ID	128230 233910 600225
Gene Ontology	Hyperlink
Gene Summary	This gene encodes a member of the GTP cyclohydrolase family. The encoded protein is the first and rate-limiting enzyme in tetrahydrobiopterin (BH4) biosynthesis, catalyzing the conversion of GTP into 7,8-dihydroneopterin triphosphate. BH4 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. [provided by RefSeq]
Other Designations	guanosine 5'-triphosphate cyclohydrolase I

Publication Reference

- [GTP cyclohydrolase and tetrahydrobiopterin regulate pain sensitivity and persistence.](#)

Tegeder I, Costigan M, Griffin RS, Abele A, Belfer I, Schmidt H, Ehnert C, Nejim J, Marian C, Scholz J, Wu T, Allchorne A, Diatchenko L, Binshtok AM, Goldman D, Adolph J, Sama S, Atlas SJ, Carlezon WA, Parsegian A, Lötsch J, Fillingim RB, Maixner W, Geisslinger G, Max MB, Woolf CJ.

Nature Medicine 2006 Nov; 12(11):1269.

Application: WB, Human, Human white blood cells

Pathway

- [Folate biosynthesis](#)
- [Metabolic pathways](#)

Disease

- [Acute Disease](#)
- [Autistic Disorder](#)
- [Cardiovascular Diseases](#)
- [Cerebrovascular Disorders](#)
- [Chromosome Aberrations](#)
- [Chromosome Deletion](#)
- [Chronic Disease](#)
- [Coronary Artery Disease](#)
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- [Genetic Predisposition to Disease](#)
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