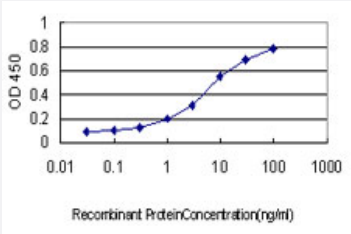
GCH1 monoclonal antibody (M02), clone 2C4

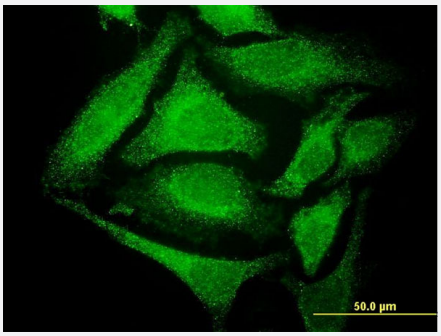
Catalog # H00002643-M02 Size 100 ug

Applications



Sandwich ELISA (Recombinant protein)

Detection limit for recombinant GST tagged GCH1 is approximately 0.1ng/ml as a capture antibody.



Immunofluorescence

Immunofluorescence of monoclonal antibody to GCH1 on HeLa cell . [antibody concentration 10 ug/ml]

Specification

Product Description	Mouse monoclonal antibody raised against a full length recombinant GCH1.
Immunogen	GCH1 (AAH25415.1, 1 a.a. ~ 250 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Sequence	MEKGPVRAPAEKPRGARCSNGFPERDPPRPGPSRPAEKPPRPEAKSAQPADGWKGERPRSE EDNELNLPNLAAAYSSILSSLGENPQRQGLLKTPWRAASAMQFFTKGYQETISDVLNDAIFDEDHD EMVIVKDIDMFSMCEHHLVPFVGKVHIGYLPNKQVLGLSKLARIVEIYSRRLQVQERLTKQIAVAITE ALRPAGVGVVVEATHMCMVMRGVQKMNSKTVTSTMLGVFREDPKTREEFLTLIRS
Host	Mouse
Reactivity	Human

Isotype	IgG1 Kappa
Quality Control Testing	Antibody Reactive Against Recombinant Protein.
Storage Buffer	In 1x PBS, pH 7.4
Storage Instruction	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Applications

- Sandwich ELISA (Recombinant protein)

  Detection limit for recombinant GST tagged GCH1 is approximately 0.1ng/ml as a capture antibody.

  Protocol Download

- ELISA

- Immunofluorescence

  Immunofluorescence of monoclonal antibody to GCH1 on HeLa cell . [antibody concentration 10 ug/ml]

Gene Info — GCH1

Entrez GeneID	2643
GeneBank Accession#	BC025415
Protein Accession#	AAH25415.1
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

Pathway

- Folate biosynthesis
- Metabolic pathways

Disease

- Acute Disease
- Autistic Disorder
- Cardiovascular Diseases
- Cerebrovascular Disorders
- Chromosome Aberrations
- Chromosome Deletion
- Chronic Disease
- Coronary Artery Disease
- Coronary Disease
- Diabetes Mellitus
- Diabetic Angiopathies
- Dystonia
- Dystonic Disorders
- Edema
- Genetic Predisposition to Disease
- Hypertension
- Labor Pain
- Low Back Pain
- Mental Retardation

- Neoplasms
- Pain
- Pain Threshold
- Pancreatitis
- Parkinson disease
- Sciatica