

# Product datasheet

info@arigobio.com

ARG64624 anti-GCH1 antibody

Package: 100 μg Store at: -20°C

# **Summary**

Product Description Goat Polyclonal antibody recognizes GCH1

Tested Reactivity Hu

Predict Reactivity Ms, Rat

Tested Application IHC-P, WB

Specificity This antibody is expected to recognize all four isoforms (NP\_000152.1; NP\_001019195.1;

NP\_001019241.1; NP\_001019242.1)

Host Goat

**Clonality** Polyclonal

Isotype IgG

Target Name GCH1

Species Human

 Immunogen
 C-GKVHIGYLPNKQ

 Conjugation
 Un-conjugated

Alternate Names DYT14; HPABH4B; GTPCH1; GCH; GTP cyclohydrolase 1; GTP-CH-1; DYT5; GTP cyclohydrolase I; GTP-CH-

I; DYT5a; EC 3.5.4.16

## **Application Instructions**

Application table	Application	Dilution
	IHC-P	5 μg/ml
	WB	0.5 - 1.5 μg/ml
Application Note	WB: Recommend incubate at RT for 1h.  IHC-P: Antigen Retrieval: Steam tissue section in Citrate buffer (pH 6.0).  * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

# **Properties**

Form Liquid

Purification Purified from goat serum by antigen affinity chromatography.

Buffer Tris saline (pH 7.3), 0.02% Sodium azide and 0.5% BSA.

Preservative 0.02% Sodium azide

Stabilizer 0.5% BSA

Concentration 0.5 mg/ml

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed

before use.

Note For laboratory research only, not for drug, diagnostic or other use.

#### Bioinformation

Database links GeneID: 2643 Human

Swiss-port # P30793 Human

Background 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, Jul 2008]

Research Area Cell Biology and Cellular Response antibody; Metabolism antibody; Neuroscience antibody; Signaling

Transduction antibody

Calculated Mw 28 kDa

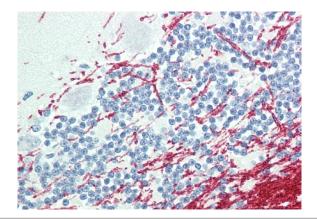
PTM Phosphorylated by casein kinase II at Ser-81 in HAECs during oscillatory shear stress; phosphorylation at

Ser-81 results in increased enzyme activity.

### **Images**

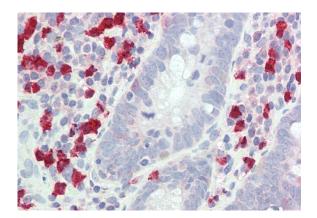
250kDa
150kDa
100kDa
Western Blot: Human Tonsil lysate (35 μg protein in RIPA buffer)
75kDa
stained with ARG64624 anti-GCH1 antibody at 0.5 μg/ml dilution.

50kDa
37kDa
25kDa
20kDa



#### ARG64624 anti-GCH1 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human cerebellum tissue. Antigen Retrieval: Steam tissue section in Citrate buffer (pH 6.0). The tissue section was stained with ARG64624 anti-GCH1 antibody at 5  $\mu g/ml$  dilution followed by AP-staining.



## ARG64624 anti-GCH1 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human small intestine tissue. Antigen Retrieval: Steam tissue section in Citrate buffer (pH 6.0). The tissue section was stained with ARG64624 anti-GCH1 antibody at 5  $\mu g/ml$  dilution followed by AP-staining.