

## Mouse anti-Human GCH1 Monoclonal Antibody | anti-GCH1 antibody

GCH1 (GTP Cyclohydrolase 1, GTP Cyclohydrolase I, GTP-CH-I, DYT5, GCH) (HRP)

|                              |                      |                            |                                                                                       |
|------------------------------|----------------------|----------------------------|---------------------------------------------------------------------------------------|
| CATALOG #<br><b>AAA25405</b> | HOST<br><b>Mouse</b> | REACTIVITY<br><b>Human</b> | APPLICATIONS<br><b>ELISA, Immunohistochemistry, Immunoprecipitation, Western Blot</b> |
|------------------------------|----------------------|----------------------------|---------------------------------------------------------------------------------------|

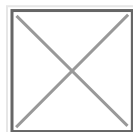
### PRODUCT SYNONYMS

GCH1; Monoclonal Antibody; GCH1 (GTP Cyclohydrolase 1; GTP Cyclohydrolase I; GTP-CH-I; DYT5; GCH) (HRP); anti-GCH1 antibody

### PRODUCT SPECIFICATIONS

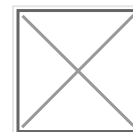
|                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host                                           | Mouse                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Reactivity                                     | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Clonality                                      | Monoclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Isotype                                        | IgG2a,k                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Clone Number                                   | 4A12                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Specificity                                    | Recognizes human GCH1.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Purity/Purification                            | Purified                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Form/Format                                    | Supplied as a liquid in PBS, pH 7.2. No preservative added. Labeled with horseradish peroxidase (HRP).                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Applicable Applications for anti-GCH1 antibody | ELISA, IHC (Immunohistochemistry), IP (Immunoprecipitation), WB (Western Blot)                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Application Notes                              | IHC-P: 3ug/ml<br>Applications are based on unconjugated antibody.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Immunogen                                      | Partial recombinant protein corresponding to aa84-172 from human GCH1 (NP_000152) with GST tag. MW of the GST tag alone is 26kD.                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Immunogen Sequence                             | ENPQRQGLLKTPWRAASAMQFFTKGYQETISDVLNDAIFDEHDDEMIVKIDIMFSMCEHHLVPFVGKVVHIGYLPNKQVLGLSKLARIV                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Conjugate                                      | HRP                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Preparation and Storage                        | Store product at 4 degree C if to be used immediately within two weeks. For long-term storage, aliquot to avoid repeated freezing and thawing and store at -20 degree C. Aliquots are stable at -20 degree C for 12 months after receipt. Dilute required amount only prior to immediate use. Further dilutions can be made in assay buffer. Note: Sodium azide is a potent inhibitor of peroxidase and should not be added to HRP conjugates. For maximum recovery of product, centrifuge the original vial after thawing and prior to removing the cap. |

### IMAGES



#### Application Data

Detection limit for recombinant GST tagged GCH1 is ~0.3ng/ml as a capture antibody.



#### IP (Immunoprecipitation)

Immunoprecipitation of GCH1 transfected lysate using 127227 and Protein A Magnetic Bead and immunoblotted with GCH1 rabbit polyclonal antibody.

**IHC (Immunohistochemistry)**

Immunoperoxidase on formalin-fixed paraffin-embedded human lymph node using 127227 (3ug/ml).

**WB (Western Blot)**

Western Blot analysis of GCH1 expression in transfected 293T cell line using 127227. Lane 1: GCH1 transfected lysate (27.9kD). Lane 2: Non-transfected lysate.

**WB (Western Blot)**

Western Blot analysis of GCH1 using 127227 expression in IMR-32.

**WB (Western Blot)**

Western Blot detection against Immunogen (35.53kD).

## ADDITIONAL INFORMATION

|                                                  |                                                                                                                                                                                                                                                                |
|--------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product Categories/Family for anti-GCH1 antibody | <a href="#">Antibodies</a> ; <a href="#">Enzymes</a>                                                                                                                                                                                                           |
| References                                       | 1. Vascular Dysfunction in Streptozotocin-Induced Experimental Diabetes Strictly Depends on Insulin Deficiency. Oelze M, Knorr M, Schuhmacher S, Heeren T, Otto C, Schulz E, Reifenberg K, Wenzel P, Munzel T, Daiber A.J Vasc Res. 2011 Jan 27;48(4):275-284. |

## NCBI AND UNIPROT INFORMATION

|                                  |                                                    |
|----------------------------------|----------------------------------------------------|
| NCBI GI #                        | 399536                                             |
| NCBI GeneID                      | 2643                                               |
| NCBI Accession #                 | <a href="#">NP_000152</a>                          |
| NCBI GenBank Nucleotide #        | <a href="#">NM_000161</a>                          |
| UniProt Accession #              | <a href="#">P30793</a>                             |
| Molecular Weight                 | 28kDa                                              |
| NCBI Official Full Name          | GTP cyclohydrolase 1                               |
| NCBI Official Synonym Full Names | GTP cyclohydrolase 1                               |
| NCBI Official Symbol             | GCH1                                               |
| NCBI Official Synonym Symbols    | GCH; DYT5; DYT14; DYT5a; GTPCH1; HPABH4B; GTP-CH-1 |
| NCBI Protein Information         | GTP cyclohydrolase 1                               |
| UniProt Protein Name             | GTP cyclohydrolase 1                               |
| UniProt Gene Name                | <b>GCH1</b>                                        |
| UniProt Synonym Gene Names       | DYT5; GCH                                          |
| UniProt Entry Name               | GCH1_HUMAN                                         |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | [contact@aaabiotech.com](mailto:contact@aaabiotech.com)

Online datasheet: <https://stage.aaabiotech.com/monoclonal/gch1-antibody-clone-4a12-immunohistochemistry-immunoprecipitation-western-blot-elisa/25405>