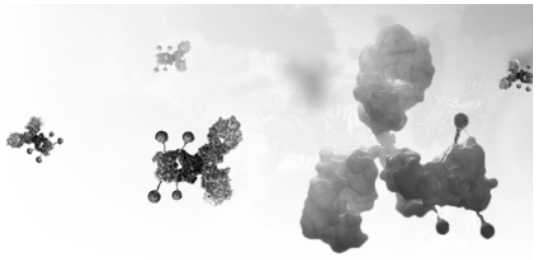

# Anti-GCH1 (internal region) polyclonal antibody (DPAB-DC1303)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

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|---|---|
| **Antigen Description** | 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. |
| **Specificity** | This antibody is expected to recognize all four isoforms (NP_000152.1; NP_001019195.1; NP_001019241.1; NP_001019242.1). |
| **Immunogen** | A synthetic peptide corresponding to internal region of human GCH1. The sequence is C-GKVHIGYLPNKQ |
| **Source/Host** | Goat |
| **Species Reactivity** | Human |
| **Purification** | Antigen affinity purification |
| **Conjugate** | Unconjugated |
| **Applications** | WB (Tissue lysate), ELISA, |
| **Format** | Liquid |
| **Concentration** | 0.5 mg/mL |
| **Size** | 100 µg |
| **Buffer** | In Tris saline, pH 7.3 (0.5% BSA, 0.02% sodium azide) |

45-1 Ramsey Road, Shirley, NY 11967, USA
Email: info@creative-diagnostics.com
Tel: 1-631-624-4882 Fax: 1-631-938-8221

| | |
|---|---|
| **Preservative** | 0.02% Sodium Azide |
| **Storage** | Store at -20°C.Aliquot to avoid repeated freezing and thawing. |

# GENE INFORMATION

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|---|---|
| **Gene Name** | GCH1 GTP cyclohydrolase 1 [ Homo sapiens (human) ] |
| **Official Symbol** | GCH1 |
| **Synonyms** | GCH1; GTP cyclohydrolase 1; GCH; DYT5; DYT14; DYT5a; GTPCH1; HPABH4B; GTP-CH-1; GTP-CH-I; dystonia 14; GTP cyclohydrolase I; guanosine 5-triphosphate cyclohydrolase I; |
| **Entrez Gene ID** | 2643 |
| **Protein Refseq** | NP_000152 |
| **UniProt ID** | A0A024R642 |
| **Chromosome Location** | 14q22.1-q22.2 |
| **Pathway** | Folate biosynthesis; Metabolism; Tetrahydrobiopterin (BH4) synthesis, recycling, salvage and regulation; tetrahydrobiopterin biosynthesis I |
| **Function** | GTP binding; GTP cyclohydrolase I activity; NOT GTP cyclohydrolase I activity; GTP-dependent protein binding |

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