

## Recombinant Human GCH1 Protein, GST-tagged

Cat. No. GCH1-4794H Lot. No. (See product label)

### SPECIFICATION

<b>Product Overview</b>	Human GCH1 full-length ORF ( AAH25415.1, 1 a.a. - 250 a.a.) recombinant protein with GST-tag at N-terminal.
<b>Species</b>	Human
<b>Source</b>	Wheat Germ
<b>Description</b>	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]
<b>Molecular Mass</b>	53.24 kDa
<b>AA Sequence</b>	MEKGPVRAPAEKPRGARCSNGFPERDPPRPGPSRPAEKPPRPEAKSAQPADGWK GERPRSEEDNELNLPNLAAAYSSILSSLGENPQRQGLLKTPWRAASAMQFFTKGYQ ETISDVLNDAIFDEDHDEMIVKIDIMFSMCEHHLVPFVGKVHIGYLPNKQVLGLSKL ARIVEIYSRRLQVQERLTKQIAVAITEALRPAGVGVVVEATHMCMVMRGVQKMNSKT VTSTMLGVFREDPKTREEFLTLIRS
<b>Applications</b>	Enzyme-linked Immunoabsorbent Assay

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Western Blot (Recombinant protein)  
Antibody Production  
Protein Array

**Notes** Best use within three months from the date of receipt of this protein.

**Storage** Store at -80 centigrade. Aliquot to avoid repeated freezing and thawing.

**Storage Buffer** 50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.

## GENE INFORMATION

**Gene Name** GCH1 GTP cyclohydrolase 1 [ Homo sapiens ]

**Official Symbol** GCH1

**Synonyms** GCH1; GTP cyclohydrolase 1; dystonia 14, DYT5, DYT14, GCH; dopa responsive dystonia; DYT5a; GTPCH1; GTP-CH-I; dystonia 14; GTP cyclohydrolase I; guanosine 5-triphosphate cyclohydrolase I; GCH; DYT5; DYT14; HPABH4B; GTP-CH-1;

**Gene ID** 2643

**mRNA Refseq** NM\_001024070

**Protein Refseq** NP\_001019241

**MIM** 600225

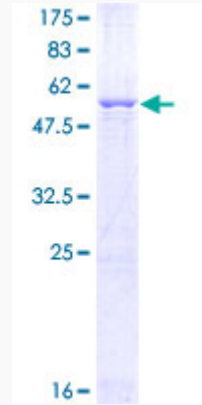
**UniProt ID** P30793

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**Quality Control  
Testing**



12.5% SDS-PAGE Stained with Coomassie Blue.

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