

## DESCRIPTION

|                                                                                                                                                                                                         |                                                                                     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| <b>Species Reactivity</b>                                                                                                                                                                               | Human                                                                               |
| <b>Specificity</b>                                                                                                                                                                                      | Detects human GCHFR in ELISAs.                                                      |
| <b>Source</b>                                                                                                                                                                                           | Monoclonal Mouse IgG <sub>1</sub> Clone # 846011                                    |
| <b>Purification</b>                                                                                                                                                                                     | Protein A or G purified from hybridoma culture supernatant                          |
| <b>Immunogen</b>                                                                                                                                                                                        | <i>E. coli</i> -derived recombinant human GCHFR<br>Met1-Glu84<br>Accession # P30047 |
| <b>Conjugate</b>                                                                                                                                                                                        | Alexa Fluor 532<br>Excitation Wavelength: 534 nm<br>Emission Wavelength: 553 nm     |
| <b>Formulation</b>                                                                                                                                                                                      | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide                        |
| *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions. |                                                                                     |

## APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

**Western Blot** Optimal dilution of this antibody should be experimentally determined.

## PREPARATION AND STORAGE

|                                |                                                                                                                   |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <b>Shipping</b>                | The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below. |
| <b>Stability &amp; Storage</b> | Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied                          |

## BACKGROUND

GCHFR (GTP cyclohydrolase I feedback receptor), also called GFRP, is an 84 amino acid enzyme inhibitor that binds to and regulates the activity of GTP cyclohydrolase I. GTP cyclohydrolase I is the rate-limiting enzyme in biosynthesis of tetrahydrobiopterin, an essential cofactor for nitric oxide synthases and aromatic hydrolases. GCHFR is found as a 20 kDa homodimer in the nucleus and cytoplasm of multiple cell types, including endothelial cells, keratinocytes and melanocytes. Human GCHFR shares 93% amino acid sequence identity with mouse and rat GCHFR, which in turn share 100% identity with each other.

## PRODUCT SPECIFIC NOTICES

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