

DESCRIPTION

Species Reactivity	Human/Mouse/Rat
Specificity	Detects human, mouse, and rat Glyoxalase II in direct ELISAs and Western blots. In direct ELISAs, less than 1% cross-reactivity with recombinant human Glyoxalase I is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human Glyoxalase II Met49-Ile254 Accession # Q16775
Conjugate	Alexa Fluor 700 Excitation Wavelength: 675-700 nm Emission Wavelength: 723 nm
Formulation	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

Shipping The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

Stability & Storage Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Glyoxalase II (GLO2; also hydroxyacylglutathione hydrolase 2 and Glx II) is a monomeric, cytosolic 29 kDa member of the Glyoxylase II family, metallo-β-lactamase superfamily of enzymes. It is expressed in liver and kidney, and converts GLO1-generated lactoylglutathione into lactate and GSH. It is up-regulated by p63 and p73, and thus serves as a p53-associated survival factor. Human GLO2 is 260 amino acids (aa) in length. It binds two atoms of Zn and contains one substrate binding region (aa 143-145 plus 249-252). The 29 kDa form represents 80-90% of cellular GLO2. There is also a 32-33 kDa, 308 aa mitochondrial isoform that arises via the use of an alternative start site. Its function is unclear, given that mitochondria do not contain GLO1. There is an additional potential isoform that shows an insertion of nine aa after Thr167. Human GLO2 shares approximately 90% aa identity with mouse GLO2.

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc., and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.