

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 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 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.

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