

## **GLO1 Antibody (N-term)**

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP6649a

## **Specification**

## GLO1 Antibody (N-term) - Product Information

Application IF, WB, IHC-P, FC,E

**Primary Accession** 004760 Other Accession **O4R5F2** Reactivity Human Predicted Monkey Host Rabbit Clonality **Polyclonal** Isotype Rabbit IgG Calculated MW 20778 Antigen Region 23-51

# GLO1 Antibody (N-term) - Additional Information

#### **Gene ID 2739**

#### **Other Names**

Lactoylglutathione lyase, Aldoketomutase, Glyoxalase I, Glx I, Ketone-aldehyde mutase, Methylglyoxalase, S-D-lactoylglutathione methylglyoxal lyase, GLO1

## Target/Specificity

This GLO1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 23-51 amino acids from the N-terminal region of human GLO1.

#### **Dilution**

IF~~1:10~50 WB~~1:1000 IHC-P~~1:50~100 FC~~1:10~50

#### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

## **Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

GLO1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

## **GLO1 Antibody (N-term) - Protein Information**





## Name GLO1

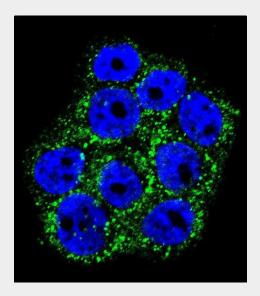
**Function** Catalyzes the conversion of hemimercaptal, formed from methylglyoxal and glutathione, to S-lactoylglutathione (PubMed:20454679, PubMed:23122816, PubMed:9705294). Involved in the regulation of TNF-induced transcriptional activity of NF-kappa-B (PubMed:19199007). Required for normal osteoclastogenesis (By similarity).

# GLO1 Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

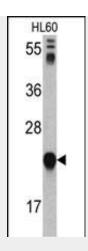
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# GLO1 Antibody (N-term) - Images

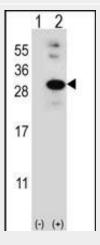


Confocal immunofluorescent analysis of GLO1 Antibody (N-term)(Cat#AP6649a) with WiDr cell followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green). DAPI was used to stain the cell nuclear (blue).

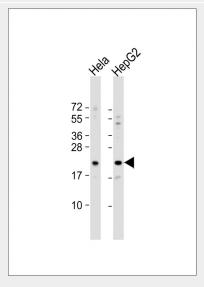




Western blot analysis of GLO1 antibody (N-term) (Cat. #AP6649a) in HL60 cell line lysates (35ug/lane). GLO1 (arrow) was detected using the purified Pab.

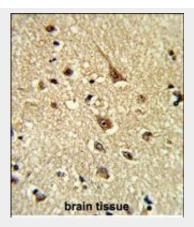


Western blot analysis of GLO1 (arrow) using rabbit polyclonal GLO1 Antibody (N-term) (Cat. #AP6649a). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the GLO1 gene.

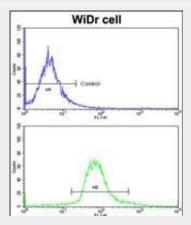


All lanes : Anti-GLO1 Antibody (N-term) at 1:1000 dilution Lane 1: Hela whole cell lysate Lane 2: HepG2 whole cell lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 21 kDa Blocking/Dilution buffer: 5% NFDM/TBST.





Formalin-fixed and paraffin-embedded human brain tissue reacted with GLO1 Antibody (N-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



Flow cytometric analysis of widr cells using GLO1 Antibody (N-term)(bottom histogram) compared to a negative control cell (top histogram)FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

## GLO1 Antibody (N-term) - Background

The enzyme GLO1 is responsible for the catalysis and formation of S-lactoyl-glutathione from methylglyoxal condensation and reduced glutatione. Glyoxalase I is linked to HLA and is localized to 6p21.3-p21.1, between HLA and the centromere.

## **GLO1 Antibody (N-term) - References**

Germanova, A., Cancer Invest. 27 (6), 655-660 (2009) Engelen, L., J. Hypertens. 27 (7), 1399-1403 (2009)