10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

GLO1 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6649a

Product Information

Application	WB, IHC-P, FC, IF, E
Primary Accession	Q04760
Other Accession	Q4R5F2
Reactivity	Human
Predicted	Monkey
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB20069
Calculated MW	20778
Antigen Region	23-51

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	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 IF~~1:10~50 E~~Use at an assay dependent concentration.
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.

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).

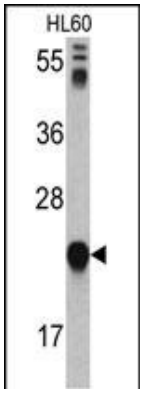
Background

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.

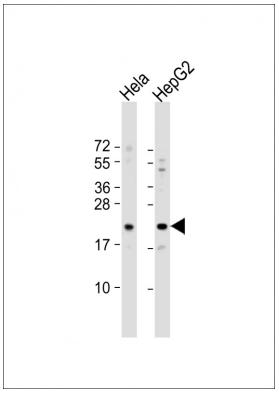
References

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

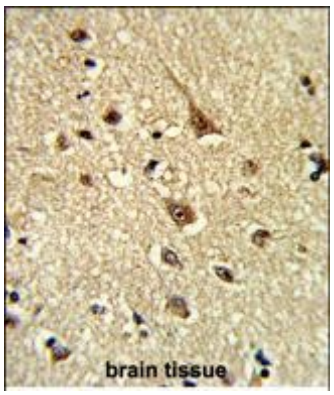
Images



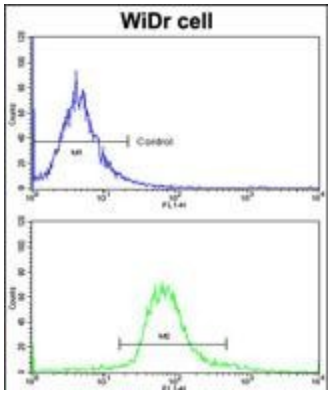
Western blot analysis of GLO1 antibody (N-term) (Cat. #AP6649a) in HL60 cell line lysates (35ug/lane). GLO1 (arrow) was detected using the purified Pab.



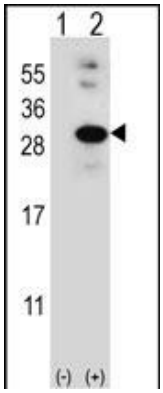
All lanes : Anti-GLO1 Antibody (N-term) at 1:1000 dilution Lane 1: Hela whole cell lysate Lane 2: HepG2 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 21 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



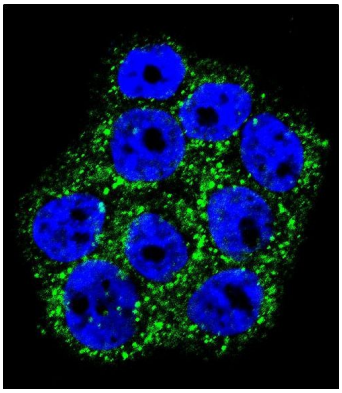
Formalin-fixed and paraffin-embedded human brain tissue reacted with GLO1 Antibody (N-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



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.



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.



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