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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, Mouse, Rat, Bovine, Canine, Rabbit, Chicken
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).

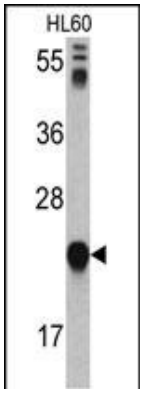
Background

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.

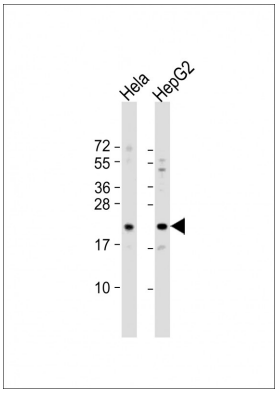
References

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

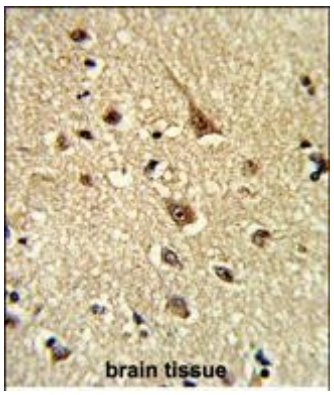
Images



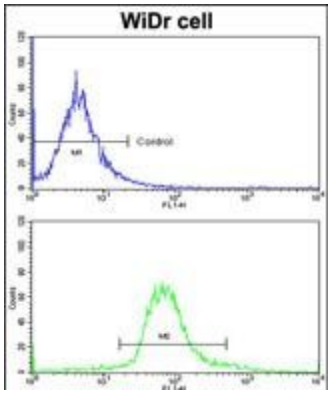
Western blot analysis of GLO1 antibody (N-term) (Cat. #AP6649a) in HL60 cell line lysates (35ug/lane). GLO1 (arrow) was detected using the purified Pab.



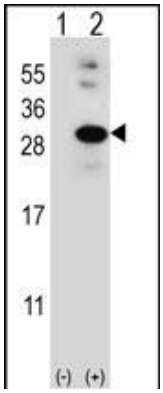
All lanes : Anti-GLO1 Antibody (N-term) at 1:1000 dilution Lane 1: Hela whole cell lysate Lane 2: HepG2 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 21 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



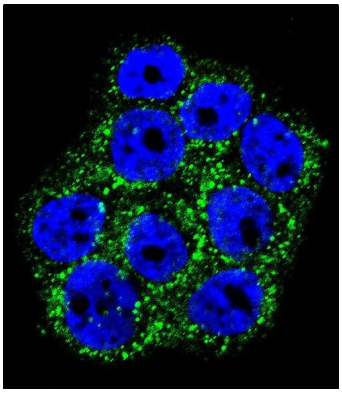
Formalin-fixed and paraffin-embedded human brain tissue reacted with GLO1 Antibody (N-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



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).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.