Product Datasheet

GLO1 Rabbit mAb

Catalog No: #49754

Package Size: #49754-1 50ul #49754-2 100ul

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

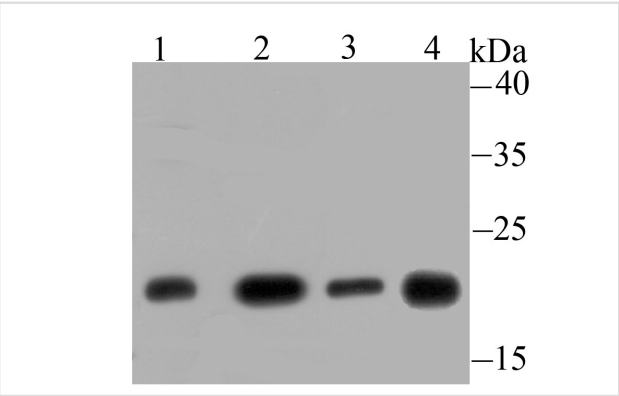
Description

Product Name	GLO1 Rabbit mAb
Host Species	Recombinant Rabbit
Clonality	Monoclonal antibody
Clone No.	JU44-11
Purification	ProA affinity purified
Applications	WB,ICC,IHC,FC
Species Reactivity	Human;Mouse;Rat
Immunogen Description	Recombinant protein
Conjugates	Unconjugated
Other Names	Aldoketomutase antibody glo1 antibody GLOD1 antibody Glx I antibody GLYI antibody glyoxalase domain containing 1 antibody Glyoxalase I antibody Ketone aldehyde mutase antibody Ketone-aldehyde mutase antibody Lactoyl glutathione lyase antibody Lactoylglutathione lyase antibody LGUL_HUMAN antibody Methylglyoxalase antibody S D lactoylglutathione methylglyoxal lyase antibody S-D-lactoylglutathione methylglyoxal lyase antibody
Accession No.	Swiss-Prot#:Q04760
Calculated MW	21 kDa
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

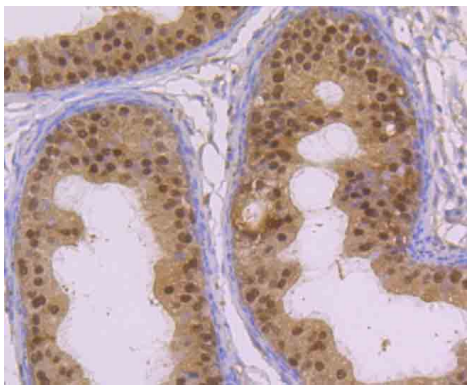
Application Details

WB: 1:500-1:2,000 IHC: 1:100-1:500 ICC: 1:100-1:500FC: 1:50-1:100

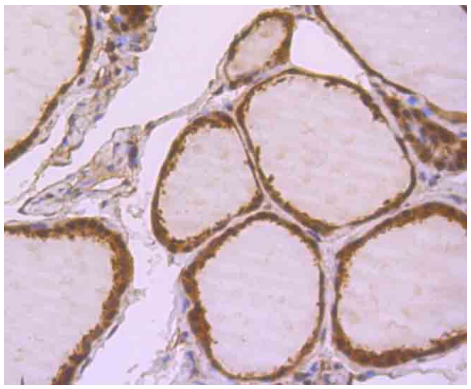
Images



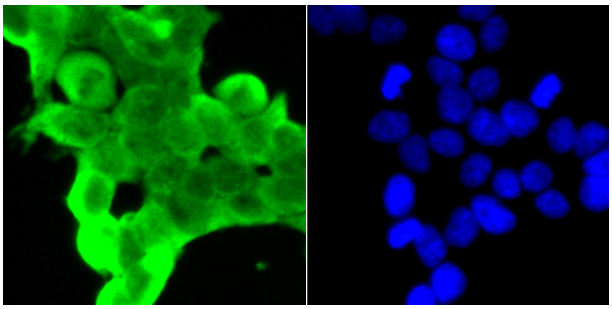
Western blot analysis of GLO1 on different lysates using anti-GLO1 antibody at 1/500 dilution. Positive control: Lane 1: Mouse testis tissue Lane 2: C2C12 Lane 3: 293 Lane 4: Rat spleen tissue



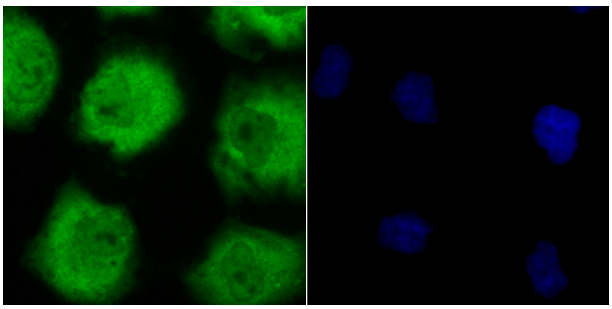
Immunohistochemical analysis of paraffin-embedded rat epididymis tissue using anti-GLO1 antibody. Counter stained with hematoxylin.



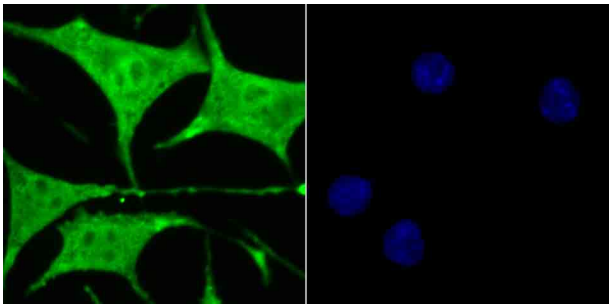
Immunohistochemical analysis of paraffin-embedded human thyroid gland tissue using anti-GLO1 antibody. Counter stained with hematoxylin.



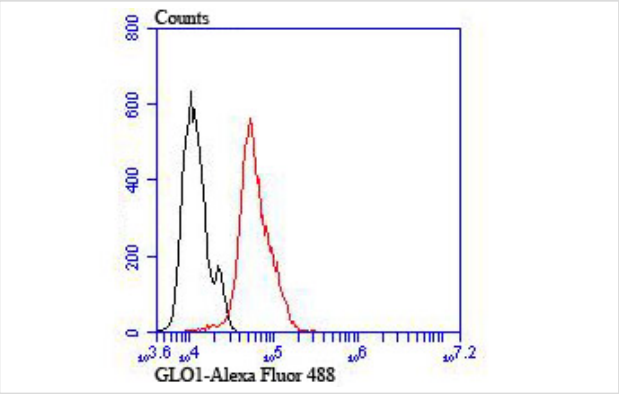
ICC staining GLO1 in 293T cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



ICC staining GLO1 in HUVEC cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



ICC staining GLO1 in SH-SY5Y cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



Flow cytometric analysis of Hela cells with GLO1 antibody at 1/100 dilution (red) compared with an unlabelled control (cells without incubation with primary antibody; black).

Background

The glyoxal pathway plays a role in the detoxification of glucose degradation products (GDP). Glyoxalase I (GLO1), a member of the glyoxalase family, is effective in eliminating GDP. Overexpression or silencing of Glyoxalase I in mice brain suggests an association between Glyoxalase I and anxiety. Glyoxalase I has three isoforms generated from two alleles in the genome which forms two homodimers and one heterodimer, each subunit binding one zinc ion. Research demonstrates that GLO1 gene expression is induced in colon carcinoma. Both an insulin response element (IRE), and a zinc metal response element (MRE) in the promoter region of the GLO1 gene have been identified.

References

1. de Hemptinne V et al. Phosphorylation on Thr-106 and NO-modification of glyoxalase I suppress the TNF-induced transcriptional activity of NF-kappaB. Mol Cell Biochem 325:169-178 (2009). 2. Ridderstroem M et al. Involvement of an active-site Zn2+ ligand in the catalytic mechanism of human glyoxalase I. J Biol Chem 273:21623-21628 (1998).

Published Papers

Fan Jiayi, Zhang Bing, Yu Yongtao, Yang Xiaoqing, Zhao Wuduo, Yuan Hang, Huang Yanjie, Yu Ajuan, Ouyang Gangfeng el at., A lactate capture-sensing platform for facilitating early differential diagnosis of minimal change disease and focal segmental glomerulosclerosis in renal diseases, Biomaterials, (2025)

PMID:41192155

Note: This product is for in vitro research use only and is not intended for use in humans or animals.