Bio Academia
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AS ONE

# Anti-glyoxalase I (GLO1) antibody, rat monoclonal (6F10)

# 74-001 100 µg

Glyoxalase I (GLO1) is an enzyme that plays a role in the detoxification of methylglyoxal (MG), a side-product of glycolysis, via condensation with glutathione to produce S-lactoyl-glutathione. GLO1 is a zinc metalloenzyme whose crystal structure has been solved. The bacterial and yeast enzymes are monomeric while the mammalian one is homodimeric and its sequence is well conserved. GLO1 is found over-expressed in some tumors. GLO1 has also been suggested to be involved in anxiety diseases, autism, and Alzheimer's disease. The antibody was produced from the hybridoma cultured in serum-free medium and purified under mild conditions by propriety chromatography processes.

## Applications

1. Western blot ~X 1,000 2. Immunocytochemistry 3. ELISA

Other applications are not tested.

## Specification

Immunogen: Recombinant GST-fused mouse glyoxalase I (full length)
Isotype: Rat IgG2b κ
Form: Purified monoclonal antibody (IgG) 1mg/ml in PBS, 50% glycerol, filter-sterilized
Specificity: Specific to human, simian, and mouse glyoxalase I. Other species are not tested.
Storage: -20°C, for long term storage -70°C

**Data Link**: UniProtKB/Swiss-Prot **Q9CPU0** (LGUL_MOUSE)

## References


1. Chen F *et al* "Role for glyoxalase I in Alzheimer's disease" *Proc Natl Acad Sci USA* 101: 7687–7692 (2004) PMID: 15128939
2. Junaid MA *et al* "Proteomic studies identified a single nucleotide polymorphism in glyoxalase I as autism susceptibility factor" *Am J Med Genet A* 131: 11–17 (2004) PMID: 15386471
3. Hovatta I *et al* "Glyoxalase 1 and glutathione reductase 1 regulate anxiety in mice" *Nature* 438: 662–666 (2005) PMID: 16244648


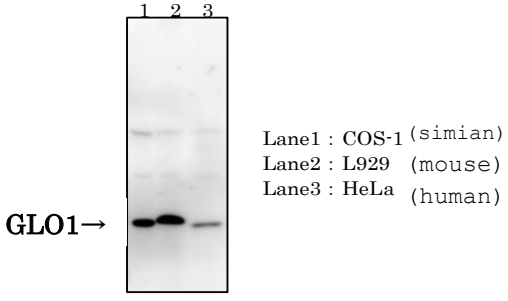


Fig.1 Detection of GLO1 protein by Western blotting with antibody 6F10.
Samples are whole cell extracts. Mouse GLO1 shows a single band of 27 kDa while human and simian ones show 29 kDa.

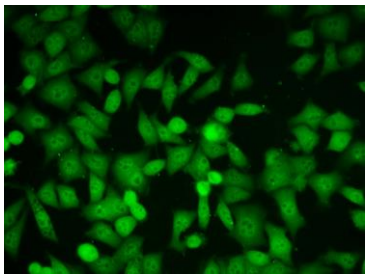

Fig.2 Immunofluorescent staining of HeLa cells with antibody 6F10.