COSMO BIO CO., LTD.
Inspiration for Life Science

MONOCLONAL ANTIBODY

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Catalog No. BAM-74-001

Anti-glyoxalase I (GLO1)

BACKGROUND

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.

Product type	Primary antibodies
Host	Rat
Source	Supernatant
Form	Liquid Purified monoclonal antibody (IgG) 1mg/ml in PBS, 50% glycerol, filter-sterilized
Volume	100ug
Concentration	1mg/ml
Specificity	Human, simian, and mouse glyoxalase I.
Antigen	Recombinant GST-fused mouse glyoxalase I (full length)
Clone	6F10
Isotype	Rat IgG2b κ

Application notes WB, ELISA, IC Not tested for other application

Recommended use

Recommended dilutions

Western Blotting: ～1/1,000

Optimal dilutions/concentrations should be determined by the end user.

Staining Pattern

Cross reactivity Other species are not tested.

Storage -20°C (long period, -70°C)

References

1) Chen,F. et al. (2004) "Role for glyoxalase I in Alzheimer's disease." Proc. Natl. Acad. Sci. USA 101: 7687-7692.

2) Junaid, M.A. et al. (2004) "Proteomic studies identified a single nucleotide polymorphism in glyoxalase I as autism susceptibility factor." Am J. Med. Genet. A. 131: 11-17.

3) Hovatta, I. et al. (2005) "Glyoxalase 1 and glutathione reductase 1 regulate anxiety in mice" Nature 438: 662-666.

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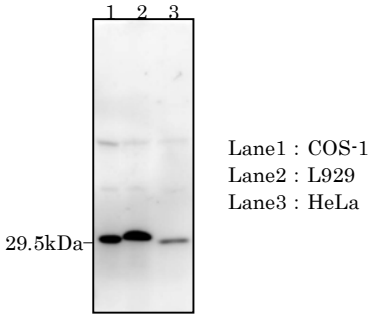

Fig.1 Detection of GLO1 protein by Western blotting with antibody 6F10.
Samples are whole cell extracts. Mouse GLO1 shows a single band of 27 kDa while human and simian ones show 29 kDa.

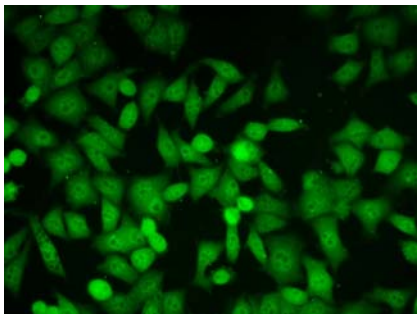

Fig.2 Immunofluorescent staining of HeLa cells with antibody 6F10.

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TOYO 2CHOME, KOTO-KU, TOKYO, 135-0016, JAPAN
URL: http://www.cosmobio.co.jp e-mail: export@cosmobio.co.jp
[Outside Japan] Phone : +81-3-5632-9617 [国内連絡先] Phone : +81-3-5632-9610
FAX : +81-3-5632-9618 FAX : +81-3-5632-9619