

Human Recombinant Glyoxalase I

CATALOG #:	6389-100	100 µg
ALTERNATE NAMES:	Lactoylglutathione lyase, Glx 1, GLO-1 Methylglyoxalase, Aldoketomutase	
SOURCE:	E.Coli	
PURITY:	> 90% by SDS - PAGE	
MOL. WEIGHT:	20.7 kDa (184 aa, 1-184 aa)	
FORMULATION:	1 mg/ml solution in 20 mM Tris-HCl buffer (pH 8.0) containing 1 mM DTT and 10% glycerol.	

STORAGE CONDITIONS:

Can be stored at 4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.

DESCRIPTION:

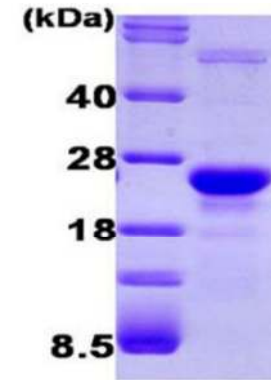
GLO1 is involved in the catalysis and formation of S-lactoyl-glutathione from methylglyoxal condensation and reduced glutathione. GLO1 is linked to HLA and is localized to 6p21.3-p21.1, between HLA and the centromere. GLO1 enzyme is abundantly expressed and present in numerous tumor cell lines, in which its concentration is often upregulated ubiquitously. GLO1 is a major susceptible gene for autism in an ethnic Chinese population from Taiwan. GLO1 might be involved in the pathophysiology of mood disorders. GLO1 plays a role in the pathophysiology of mood disorders. Overexpression of GLO1 is associated with kidney tumor.

AMINO ACID SEQUENCE:

MAEPQPPSGG LTDEAALSCC SDADPSTKDF LLQQTMLRVK DPKKSLDFYT RVLGMTLIQK
CDFPIMKFSL YFLAYEDKND IPKEKDEKIA WALSRKATLE LTHNWGTEDD ETQSYHNGNS
DPRGFGHIGI AVPDVYSACK RFEELGVK FV KKPDDGKMKG LAFIQDPDGY WIEILNPNKM
ATLM

BIOLOGICAL ACTIVITY:

Specific activity: >0.4 units/mg. One unit will form 1.0 µmol of S-lactoylglutathione from methylglyoxal and reduced glutathione per minute at pH 7.5, at 25°C. Specific activity was expressed in units/mg of protein.



15% SDS-PAGE (3ug)

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RELATED PRODUCTS:

- GST Colorimetric Activity Assay Kit (**Cat. No. K263-100**)
- GST Fluorometric Activity Assay Kit (**Cat. No. K260-100**)
- GST Inhibitor-1 (Cibacron Blue 3G-A, Sodium Salt) (**Cat. No. 1555R-1000**)
- GST Inhibitor-2 (Ethacrynic acid) (**Cat. No. 1556-1000**)
- Human recombinant GSTA1 (**Cat. No. 6346-100**)
- Human recombinant GSTP1 (**Cat. No. 6347-100**)
- Mouse recombinant GSTMu1 (**Cat. No. 6348-100**)
- Mouse recombinant GSTM1 (**Cat. No. 6349-100**)
- Schistosoma japonicum recombinant GST (**Cat. No. 6351-100**)
- Human recombinant GSR (**Cat. No. 6352-100**)

FOR RESEARCH USE ONLY! Not to be used in humans.