

Recombinant mouse Glyoxalase I protein

Catalog Number: ATGP3342

PRODUCT INFORMATION

Expression system

Baculovirus

Domain

1-184aa

UniProt No.

Q9CPU0

NCBI Accession No.

NP_079650

Alternative Names

Glyoxalase 1, Lactoylglutathione lyase, 0610009E22Rik, 1110008E19Rik, 2510049H23Rik, AW550643, Glo-1, Glo-1r, Glo-1s, Glo1-r, Glo1-s, GLY1, Qglo

PRODUCT SPECIFICATION

Molecular Weight

21.8 kDa (192aa)

Concentration

0.5mg/ml (determined by absorbance at 280nm)

Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol

Purity

> 95% by SDS-PAGE

Endotoxin level

< 1 EU per 1ug of protein (determined by LAL method)

Biological Activity

Specific activity is > 210unit/mg, and is defined as the amount of enzyme that will form 1.0 micromol of S-lactoylglutathione from methylglyoxal and reduced glutathione per minute at pH 6.5 at 25C.

Tag

His-Tag

Application

Enzyme Activity, SDS-PAGE

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

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BACKGROUND

Description

Glo1, also known as lactoylglutathione lyase, is a member of the glyoxalase I family. It plays a critical role in the detoxification of 2-oxoaldehydes, such as methylglyoxal. It involved in the regulation of TNF-induced transcriptional activity of NF-kappa-B. It was identified as a protein marker, which is consistently expressed to a higher extent in LAB-M than in HAB-M mice in several brain areas. Recombinant mouse Glo1, fused to His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques.

Amino acid Sequence

MAEPQPASSG LTDETAFFSCC SDPDPSTKDF LLQQTMLRIK DPKKSLDFYT RVLGLTLLQK LDFPAMKFSL YFLAYEDKND
IPKDKSEKTA WFTSRKATLE LTHNWTGTEDD ETQSYHNGNS DPRGFGHIGI AVPDVYSACK RFEELGVKFV KKPDDGKMKG
LAFIQDPDGY WIEILNPNKI ATIIIEHHHH HH

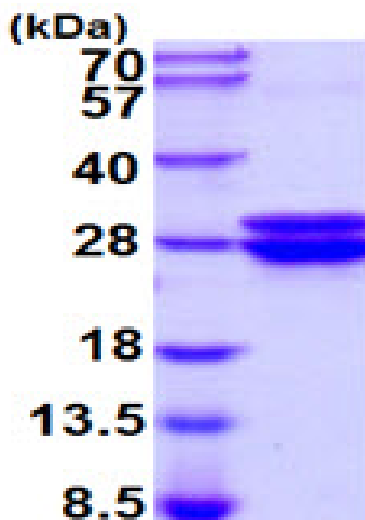
General References

Kawatani M., et al. (2008) Proc Natl Acad Sci U S A. 105:11691-11696.

Kromer SA., et al. (2005) J Neurosci. 25:4375-4384.

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

15% SDS-PAGE (3ug)