

Product datasheet for AR09139PU-L

OriGene Technologies, Inc.

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Glyoxalase I / GLO1 (1-184) Human Protein

Product data:

Product Type: Recombinant Proteins

Description: Glyoxalase I / GLO1 (1-184) human recombinant protein, 0.5 mg

Species: Human
Expression Host: E. coli

Expression cDNA Clone

or AA Sequence:

MAEPQPPSGG LTDEAALSCC SDADPSTKDF LLQQTMLRVK DPKKSLDFYT RVLGMTLIQK CDFPIMKFSL YFLAYEDKND IPKEKDEKIA WALSRKATLE LTHNWGTEDD ETQSYHNGNS

DPRGFGHIGI AVPDVYSACK RFEELGVKFV KKPDDGKMKG LAFIQDPDGY WIEILNPNKM ATLM

Predicted MW: 20.7 kDa

Concentration: lot specific

Purity: >90% by SDS - PAGE

Buffer: Presentation State: Purified

State: Liquid purified protein

Buffer System: 20 mM Tris-HCl buffer (pH 8.0) containing 1 mM DTT, 10% glycerol

Biological: >1.7 units/ml (please enquire for specific batch value). One unit will form 1.0 umol

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.

Activity Assay

Final assay concentrations: In 1.5ml reaction mix, the final concentrations are 79 mM potassium phosphate, 0.033%(w/v) reduced glutathine, 0.003% (w/v) bovine serum albumin,

0.033% methylglyoxal (w/v) and recombinant glyoxalase I (0.5ug, 1ug, 2ug).

1. Prepare 1.45ml reaction buffer without recombinant protein into suitable container (for

each protein concentration).

2. Equilibrate protein-free reaction buffer to 25C and monitor at A240nm until the value is

constant, using a spectrophotometer.

3. Dilute various concentrations of recombinant glyoxalase I (0.5ug, 1ug, 2ug) in 50ul of

10mM potassium phosphate buffer with 0.1% (w/v) BSA, pH 7.4.

4. Add 50ul of recombinant-glyoxalase I to 1.45ml reaction buffer.

5. Immediately mix by inversion and record the increase at A240nm for 5 minutes.

Preparation: Liquid purified protein





Glyoxalase I / GLO1 (1-184) Human Protein - AR09139PU-L

Protein Description: Recombinant human GLO1 protein was expressed in E.coli and purified by using

conventional chromatography techniques.

Storage: Store undiluted at 2-8°C for up to two weeks or (in aliquots) at -20°C or -70°C for longer.

Avoid repeated freezing and thawing.

Stability: Shelf life: one year from despatch.

RefSeq: NP 006699

Locus ID: 2739

UniProt ID: <u>Q04760</u>, <u>X5DNM4</u>

Cytogenetics: 6p21.2

Synonyms: GLOD1; GLYI; HEL-S-74

Summary: The enzyme encoded by this gene is responsible for the catalysis and formation of S-lactoyl-

glutathione from methylglyoxal condensation and reduced glutatione. Glyoxalase I is linked to HLA and is localized to 6p21.3-p21.1, between HLA and the centromere. [provided by

RefSeq, Jul 2008]

Protein Pathways: Pyruvate metabolism

Product images:

