

Product datasheet for **AR09139PU-N**

Glyoxalase I / GLO1 (1-184) Human Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Glyoxalase I / GLO1 (1-184) human recombinant protein, 0.1 mg
Species:	Human
Expression Host:	E. coli
Expression cDNA Clone or AA Sequence:	MAEPQPPSGG LTDEAALSCC SDADPSTKDF LLQQTMLRVK DPKKSLDFYT RVLGMTLIQK CDFPIMKFSL YFLAYEDKND IPKEKDEKIA WALSRKATLE LTHNWTGTEDD ETQSYHNGNS DPRGFGHIGI AVPDVYSACK RFEELGVK FV 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
Bioactivity:	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.
	<u>Activity Assay</u> Final assay concentrations: In 1.5ml reaction mix, the final concentrations are 79 mM potassium phosphate, 0.033%(w/v) reduced glutathione, 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



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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:	Q04760 , X5DNM4
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 glutathione. 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: