

GLXR Protein, Mouse (His-SUMO)

Cat. No.:	HY-P72212
Synonyms:	Grhpr; GlxrGlyoxylate reductase/hydroxypyruvate reductase; EC 1.1.1.79; EC 1.1.1.81
Species:	Mouse
Source:	E. coli
Accession:	Q91Z53 (M1-L328)
Gene ID:	76238
Molecular Weight:	Approximately 51.3 kDa

PROPERTIES

AA Sequence

```

MKPARLMKVF   VTGPLPAEGR   AALAQAADCE   VEQWNSDDPI
PRKDLQGVV    GAHGLLCRLS   DRVDKLLDA    AGANLRVIST
LSVGV DHLAL  DEIKKRGIRV   GYTPGVLTDA   TAELAVSLLL
TTCRRLPEAI   EEVKNGGWSS   WSP LWMCGYG  LSQSTVGIVG
LGRIGQAIAR   RLKPFVGVQRF  LYTG RQRPQ   EAAEFQAEFV
PIAQLAAESD   FIVVSCSLTP   DTMGLCSKDF   FQKMKN TAIF
INISRGDVVN   QEDLYQALAS   GQIAAAGLDV   TTPEPLPPSH
PLLLTLKNCVI  LPHIGSATYK   TRNTMSLLAA   NNLLAGLRGE
AMPSELKLL
  
```

Biological Activity The enzyme activity of this recombinant protein is testing in progress, we cannot offer a guarantee yet.

Appearance Lyophilized powder.

Formulation Lyophilized from a 0.2 µm solution of Tris-based buffer, 50% Glycerol.

Endotoxin Level <1 EU/µg, determined by LAL method.

Reconstitution It is not recommended to reconstitute to a concentration less than 100 µg/mL in ddH₂O.

Storage & Stability Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.

Shipping Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background

The GLXR protein, characterized by its multifunctional enzymatic activities, acts as a hydroxy-pyruvate reductase, glyoxylate reductase, and D-glycerate dehydrogenase. Its versatile enzymatic functions involve the reduction of hydroxypyruvate to D-

glycerate and glyoxylate to glycolate, while also oxidizing D-glycerate to hydroxypyruvate. This dynamic enzymatic profile suggests a pivotal role for GLXR in the interconversion of key metabolites within cellular pathways. The ability of GLXR to catalyze these reactions reflects its importance in metabolic processes where hydroxy-pyruvate, glyoxylate, and D-glycerate are involved, emphasizing its significance in maintaining metabolic homeostasis (

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA