

GPI, human recombinant

CATALOG #:	7822-100	100 µg
ALTERNATE NAMES:	Glucose-6-phosphate isomerase, GPI, AMF, GNPI, NLK, PGI, PHI, SA36.	
SOURCE:	E. Coli	
PURITY:	> 95% by SDS - PAGE	
MOL. WEIGHT:	65.3 kDa (578 aa, 1-558 aa + His Tag)	
FORM:	Liquid	
FORMULATION:	1 mg/ml solution in 20 mM Tris-HCl buffer (pH 8.0) containing 10% glycerol and 1 mM DTT	
ENDOTOXIN LEVEL:	< 1.0 EU per 1 µg of protein (determined by LAL method)	

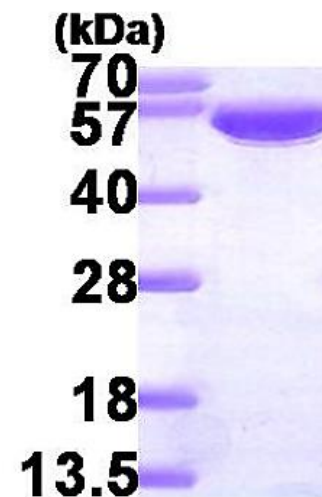
STORAGE CONDITIONS: Can be stored at 4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.

DESCRIPTION: Glucose-6-phosphate isomerase, also known as GPI, belongs to the GPI family whose members encode multifunctional phosphoglucose isomerase proteins involved in energy pathways. The protein encoded by this gene is a dimeric enzyme that catalyzes the reversible isomerization of glucose-6-phosphate and fructose-6-phosphate. Mammalian GPI can function as a tumor-secreted cytokine and an angiogenic factor (AMF) that stimulates endothelial cell motility. GPI is also a neurotrophic factor (Neuroleukin) for spinal and sensory neurons. Recombinant human GPI, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.

AMINO ACID SEQUENCE: MGSSHHHHHH SSGLVPRGSH MAALTRDPQF KLQQWYREH RSELNLRRLF DANKDRFNHF SLTLNTNHGH ILVDYSKNLV TEDVMRMLVD LAKSRGVEAA RERMFNGEKI NYTEGRAVLH VALRNRSNTP ILVDGKDVMP EVNKVLDKMK FCQVRVSGD WKGYTGKTIT DVINIGIGGS DLGPLMVTEA LKPYSSGGPR VVWYSNIDGT HIAKTLAQLN PESSLFIIAS KTFTTQETIT NAETAKEWFL QAAKDPSAVA KHVALSTNT TKVKEFGIDP QNMFEFWDVW GGRYSLWSAI GLSIALHVGF DNFEQLLSGA HWMDQHFRTT LEKNAPVLL ALLGIWYINC FGCETHAMLP YDQYLHRFAA YFQQGDME SN GKYITKSGTR

VDHQTGPIVW GEPGTNGQHA FYQLIHQGTK MIPCDFLIPV QTQHPIRKGL HHKILLANFL AQTEALMRGK STEEARKELQ AAGKSPEDLE RLLPHKVFEG NRPTNSIVFT KLTPFMLGAL VAMYEHKIFV QGIWDINSF DQWGVELGKQ LAKKIEPELD GSAQVTSHTA STNGLINFIK QQREARVQ

BIOLOGICAL ACTIVITY: Specific activity is > 90 units/mg, and one unit will convert 1.0 µmole D-fructose 6-phosphate to D-glucose 6-phosphate per minute at pH 7.4 at 25°C.



15% SDS-PAGE (3µg)

Human Recombinant GPI

RELATED PRODUCTS:

- E.Coli Recombinant G6PD (Cat. No. 6367-100)
- G6PD, Human Recombinant (Cat. No. 7532-100)
- Glucose-6-Phosphate Dehydrogenase Activity Assay Kit (Cat. No. K757-100)
- DHEA (Cat. No. 2172-100, -500)
- Human recombinant UGDH (Cat. No. 6368-50)

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

