PRODUCT INFORMATION

Expression system E.coli

Domain 1-258aa

UniProt No. 095336

NCBI Accession No. NP_036220

Alternative Names 6-phosphogluconolactonase, 6PGL

PRODUCT SPECIFICATION

Molecular Weight 29.7 kDa (278aa) confirmed by MALDI-TOF

Concentration 1mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 1mM DTT, 10% glycerol, 100mM NaCl

Purity > 95% by SDS-PAGE

Tag His-Tag

Application 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.

BACKGROUND

Description

6-phosphogluconolactonase, also known PGLS, is an enzyme in the second step pentose phosphate pathway, which is essential for the synthesis of nucleotide sugars and NADPH, the main source of reducing power. It converts 6-phosphogluconolactone to 6-phosphogluconate. Recombinant human PGLS protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.

Amino acid Sequence

<MGSSHHHHHH SSGLVPRGSH> MAAPAPGLIS VFSSSQELGA ALAQLVAQRA ACCLAGARAR FALGLSGGSL



VSMLARELPA AVAPAGPASL ARWTLGFCDE RLVPFDHAES TYGLYRTHLL SRLPIPESQV ITINPELPVE EAAEDYAKKL RQAFQGDSIP VFDLLILGVG PDGHTCSLFP DHPLLQEREK IVAPISDSPK PPPQRVTLTL PVLNAARTVI FVATGEGKAA VLKRILEDQE ENPLPAALVQ PHTGKLCWFL DEAAARLLTV PFEKHSTL

General References

Collard F., et al. (1999) FEBS Lett. 459(2):223-6. Hong M K., et al. (2008) Acta Crystallogr Sect F Struct Biol Cryst Commun. 64(11):1016-8.

DATA

SDS-PAGE



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