

Recombinant human GALK1 protein

Catalog Number: ATGP0641

PRODUCT INFORMATION

Expression system

E.coli

Domain

1-392aa

UniProt No.

P51570

NCBI Accession No.

NP_000145.1

Alternative Names

Galactokinase, GALK, GK1, Galactokinase

PRODUCT SPECIFICATION

Molecular Weight

44.4 (412aa) confirmed by MALDI-TOF

Concentration

0.5mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 20% glycerol 0.1M NaCl, 1mM DTT

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

GALK1, also often designated galactokinase, is important in the first step of the galactose metabolism pathway. (ATP + D-galactose = ADP + alpha-D-galactose 1-phosphate) Defects in GALK1 are the cause of galactosemia II. It is an autosomal recessive deficiency characterized by congenital cataracts during infancy and presenile cataracts in the adult population. The cataracts are secondary to accumulation of galactitol in the lenses. Recombinant human GALK1 protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography techniques.

Recombinant human GALK1 protein

Catalog Number: ATGP0641

Amino acid Sequence

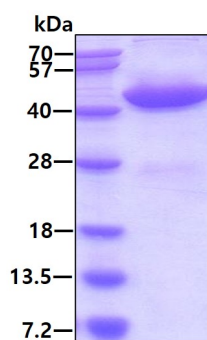
<MGSSHHHHHH SSGLVPRGSH> MAALRQPQVA ELLAEARRAF REEFGAEPPEL AVSAPGRVNL IGEHTDYNQG
LVLPMALELM TVLVGSPRKD GLVSLTTSE GADEPQRLQF PLPTAQRSLE PGTPRWANYV KGVIQYYPAA PLPGFSAVVV
SSVPLGGGLS SSASLEVATY TFLQQLCPDS GTIAARAQVC QQAHSFAGM PCGIMDQFIS LMGQKGHALL IDCRSLETSL
VPLSDPKLAV LITNSNVRHS LASSEYPVRR RQCEEVARAL GKESLREVQL EELEAARDLV SKEGFRRARH VVGEIRRTAQ
AAAALRRGDY RAFGRLMVES HRSLRDDYEV SCPELDQLVE AALAVPGVYG SRMTGGGFGG CTVTLLEASA APHAMRHIQE
HYGGTATFYI SQAADGAKVL CL

General References

Ai Y., et al. (1995) Biochem Biophys Res Commun. 212(2):687-91.
Hunter M., et al. (2001) Hum Mutat. 17(1):77-8.

DATA

SDS-PAGE



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