

Product information

GALK1, 1-392 aa

Human, His-tagged, Recombinant, *E.coli*

Cat. No. IBATGP0641

Full name: Galactokinase

NCBI Accession No.: NP_000145

Synonyms: GALK, GK1

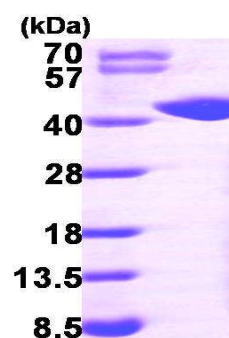
Description: GALK1, also often designated galactokinase, is important in the first step of the galactose metabolism pathway. (ATP + D-galactose = ADP + alpha-D-galactose 1-phosphate) Defects in GALK1 are the cause of galactosemia II. It is an autosomal recessive deficiency characterized by congenital 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.

Form: Liquid. 20mM Tris-HCl buffer (pH8.0) containing 20% glycerol
0.1M NaCl, 1mM DTT

Molecular Weight: 44.4 (412aa) confirmed by MALDI-TOF

Purity: > 95% by SDS - PAGE

Concentration: 0.5 mg/ml (determined by Bradford assay)



15% SDS-PAGE (3ug)

Sequences of amino acids:

MGSSHHHHHH SSGLVPRGSH MAALRQPQVA ELLAEARRAF REEFGAEPEL AVSAPGRVNL IGEHTDYNQG LVLPMAL ELM TVLVGSPRKD
GLVSLTTTSE GADEPQRLQF PLPTAQRSLE PGTPRWANYV KGVIIQYYPAA PLPGFSAVVV SSVPLGGGLS SSASLEVATY TFLQQLCPDS
GTIAARAQVC QQAHSFAGM PCGIMDQFIS LMGQKGHALL IDCRSLETSL VPLSDPKLAV LITNSNVRHS LASSEYPVRR RQCEEVARAL
GKESLREVQL EELEAARDLV SKEGFRRARH VVGEIRRTAQ AAAALRRGDY RAFGRLMVES HRSLRDDYEV SCPELDQLVE AALAVPGVYG
SRMTGGGFGG CTVTLLLEASA APHAMRH IQE HYGGTATFYL SQAADGAKVL CL

General references:

WARNING: THIS PRODUCT IS NOT INTENDED OR APPROVED FOR HUMAN, DIAGNOSTICS OR VETERINARY USE. USE OF THIS PRODUCT FOR HUMAN OR ANIMAL TESTING IS EXTREMELY HAZARDOUS AND MAY RESULT IN DISEASE, SEVERE INJURY, OR DEATH.

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Ai Y., *et al.* (1995) *Biochem Biophys Res Commun.* 212(2):687-91.

Hunter M., *et al.* (2001) *Hum Mutat.* 17(1):77-8.

Storage: 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.

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