Recombinant human GALT protein

Catalog Number: ATGP1904

PRODUCT INFORMATION

Expression system
E.coli

Domain
1-379aa

UniProt No.
P07902

NCBI Accession No.
NP_000146.2

Alternative Names
Galactose-1-phosphate uridylyltransferase, Gal-1-P uridylyltransferase, uDP-glucose--hexose-1-phosphate uridylyltransferase

PRODUCT SPECIFICATION

Molecular Weight
45.9 kDa (403aa) confirmed by MALDI-TOF

Concentration
0.25mg/ml (determined by Bradford assay)

Formulation
Liquid in. 20mM Tris-HCl buffer (pH 8.5) containing 0.2M NaCl, 10% glycerol

Purity
> 85% 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
GALT catalyzes the second step of the Leloir pathway of galactose metabolism, namely the conversion of uDP-glucose + galactose-1-phosphate to glucose-1-phosphate + uDP-galactose. The absence of this enzyme results in classic galactosemia in humans and can be fatal in the newborn period if lactose is not removed from the diet. The pathophysiology of galactosemia has not been clearly defined. Two transcript variants encoding different isoforms have been found for this gene. Recombinant human GALT protein, fused to His-tag at N-terminus, was

expressed in E. coli and purified by using conventional chromatography techniques

Amino acid Sequence

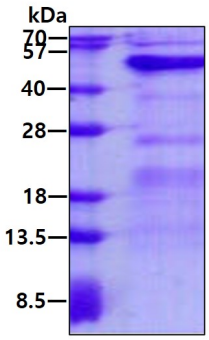
<MGSSHHHHHH SSGLVPRGSH MGSH>MSRSGT DPQQRQQASE ADAAAATFRA NDHQHIRYNP LQDEWVLVSA HRMKRPWQGQ VEPQLLKTVP RHDPLNPLCP GAIRANGEVN PQYDSTFLFD NDFPALQPDA PSPGPSDHPL FQAKSARGVC KVMCFHPWSD VTLPLMSVPE IRAVVDAWAS VTEELGAQYP WVQIFENKGA MMGCSNPHPH CQVWASSFLP DIAQREERSQ QAYKSQHGEP LLMEYSRQEL LRKERLVLTS EHWLVLVPFW ATWPYQTLLL PRRHVRRLPE LTPAERDDLA SIMKKLLTKY DNLFETSFPY SMGWHGAPTG SEAGANWNHW QLHAHYYPPL LRSATVRKFM VGYEMLAQAQ RDLTPEQAAE RLRALPEVHY HLGQKDRETA TIA

General References

Reichardt JK.(1992) Hum Mutat. (3):190-6.
Tyfield L, Reichardt J, et al. (1999). Hum Mutat. (6):417-30.

DATA

SDS-PAGE



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