

Recombinant human UDP-galactose-4-epimerase/GALE protein

Catalog Number: ATGP0614

PRODUCT INFORMATION

Expression system

E.coli

Domain

1-348aa

UniProt No.

Q14376

NCBI Accession No.

NP_000394.2

Alternative Names

UDP-glucose 4-epimerase, Galactowaldenase, UDP-N-acetylgalactosamine 4-epimerase, UDP-GalNAc 4-epimerase, UDP-N-acetylglucosamine 4-epimerase, UDP-GlcNAc 4-epimerase, UDP-galactose 4-epimerase, short chain dehydrogenase/reductase family 1E, member 1, SDR1E1

PRODUCT SPECIFICATION

Molecular Weight

40.4 kDa (368aa) confirmed by MALDI-TOF

Concentration

0.5mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 10% glycerol 5mM DTT, 0.1M NaCl, and 1mM EDTA

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

GALE, also known as uDP-glucose 4-epimerase, is a protein that functions as the third enzyme in the Leloir pathway of galactose metabolism. It is a homodimeric epimerase found in bacterial, plant, and mammalian cells. This enzyme promotes the reverse chemical reaction, the conversion of uDP-glucose to uDP-galactose. uDP-galactose is used to build galactose-containing proteins and fats, which play critical roles in chemical signaling,

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building cellular structures, transporting molecules, and producing energy. Recombinant human GALE protein, fused to His-tag at N-terminus, was expressed in *E. coli* and purified by using conventional chromatography techniques.

Amino acid Sequence

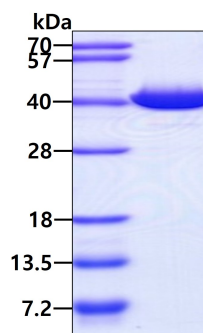
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SSATVYGNPQ YLPLDEAHPT GGCTNPYGKS KFFIEEMIRD LCQADKTWNA VLLRYFNPTG AHASGCIGED PQGIPNNLMP
YVSQVAIGRR EALNVFGNDY DTEDGTGVRD YIHVVDLAKG HIAALRKLKE QCGCRIYNLG TGTGYSVLQM VQAMEKASGK
KIPYKVVARR EGDVAACYAN PSLAQEELGW TAALGLDRMC EDLWRWQKQN PSGFGTQA

General References

Holden HM., et al. (2003) *J Biol Chem.* 278(45):43885-8.
Timson DJ., et al. (2005) *FEBS J.* 272(23):6170-7.

DATA

SDS-PAGE



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