

Product information



GALE, 1-348 aa

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

Cat. No. IBATGP0614

Full name: UDP-glucose 4-epimerase.

NCBI Accession No.: NP_000394

Synonyms: SDR1E1.

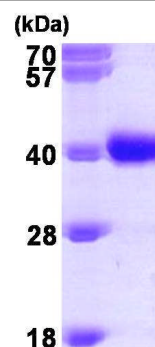
Description: GALE, also known as UDP-glucose 4-epimerase, is a protein that functions as the third enzyme in the Leloir pathway of galactose metabolism. It is a homodimeric epimerase found in bacterial, plant, and mammalian cells. This enzyme promotes the reverse chemical reaction, the conversion of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

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

Molecular Weight: 40.4 kDa (368aa) 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:

MGSSHHHHH SSGLVPRGSH MAEKVLVTGG AGYIGSHTVL ELLEAGYLPV VIDNFHNAFR GGGSLPESLR RVQELTGRSV EFEEMDILDQ
GALQRLFKKY SFMAVIHFAG LKAVGESVQK PLDYRVNLT GTIQLLEIMK AHGVKNLVFS SSATVYGNPQ YLPLDEAHPT GGCTNPYGKS
KFFIEEMIRD LCQADKTWNA VLLRYFNPTG AHASGCIGED PQGIPNNLMP YVSQVAIGRR EALNVFGNDY DTEDGTGVRD YIHVVDLAKG
HIAALRKLKE QCGCRIYNLG TGTGYSVLQM VQAMEKASGK KIPYKVARR EGDVAACYAN PSLAQEELGW TAALGLDRMC EDLWRWQKQN
PSGFGTQA

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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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.

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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