

Product datasheet for TP325521

OriGene Technologies, Inc.

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GALE (NM_001127621) Human Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Recombinant protein of human UDP-galactose-4-epimerase (GALE), transcript variant 3, 20 μg

Species: Human
Expression Host: HEK293T

Expression cDNA Clone >RC225521 protein sequence or AA Sequence: Red=Cloning site Green=Tags(s)

MAEKVLVTGGAGYIGSHTVLELLEAGYLPVVIDNFHNAFRGGGSLPESLRRVQELTGRSVEFEEMDILDQ GALQRLFKKYSFMAVIHFAGLKAVGESVQKPLDYYRVNLTGTIQLLEIMKAHGVKNLVFSSSATVYGNPQ YLPLDEAHPTGGCTNPYGKSKFFIEEMIRDLCQADKTWNAVLLRYFNPTGAHASGCIGEDPQGIPNNLMP YVSQVAIGRREALNVFGNDYDTEDGTGVRDYIHVVDLAKGHIAALRKLKEQCGCRIYNLGTGTGYSVLQM VQAMEKASGKKIPYKVVARREGDVAACYANPSLAQEELGWTAALGLDRMCEDLWRWQKQNPSGFGTQA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag: C-Myc/DDK

Predicted MW: 38.1 kDa

Concentration: >0.05 µg/µL as determined by microplate BCA method

Purity: > 80% as determined by SDS-PAGE and Coomassie blue staining

Buffer: 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

Preparation: Recombinant protein was captured through anti-DDK affinity column followed by

conventional chromatography steps.

Note: For testing in cell culture applications, please filter before use. Note that you may experience

some loss of protein during the filtration process.

Storage: Store at -80°C.

Stability: Stable for 12 months from the date of receipt of the product under proper storage and

handling conditions. Avoid repeated freeze-thaw cycles.

RefSeq: NP 001121093

Locus ID: 2582



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UniProt ID: <u>Q14376</u>, <u>A0A384NL38</u>

RefSeq Size: 1626 Cytogenetics: 1p36.11 RefSeq ORF: 1044

Synonyms: SDR1E1

Summary: This gene encodes UDP-galactose-4-epimerase which catalyzes two distinct but analogous

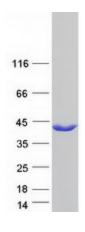
reactions: the epimerization of UDP-glucose to UDP-galactose, and the epimerization of UDP-N-acetylglucosamine to UDP-N-acetylgalactosamine. The bifunctional nature of the enzyme has the important metabolic consequence that mutant cells (or individuals) are dependent not only on exogenous galactose, but also on exogenous N-acetylgalactosamine as a necessary precursor for the synthesis of glycoproteins and glycolipids. Mutations in this gene result in epimerase-deficiency galactosemia, also referred to as galactosemia type 3, a disease characterized by liver damage, early-onset cataracts, deafness and cognitive disability, with symptoms ranging from mild ('peripheral' form) to severe ('generalized' form). Multiple alternatively spliced transcripts encoding the same protein have been identified. [provided by

RefSeq, Jul 2008]

Protein Families: Druggable Genome

Protein Pathways: Amino sugar and nucleotide sugar metabolism, Galactose metabolism, Metabolic pathways

Product images:



Coomassie blue staining of purified GALE protein (Cat# TP325521). The protein was produced from HEK293T cells transfected with GALE cDNA clone (Cat# [RC225521]) using MegaTran 2.0 (Cat# [TT210002]).