

## 32-7241: Recombinant Human UDP-Glucose 4-Epimerase/GALE (N-6His)

**Gene :** GALE

**Gene ID :** 2582

**Uniprot ID :** Q14376

### Description

Source: E.coli.

MW :40.44kD.

Recombinant Human GALE is produced by our E.coli expression system and the target gene encoding Met1-Ala348 is expressed with a 6His tag at the N-terminus. The enzyme UDP-Glucose 4-Epimerase (GALE) is a homodimeric epimerase found in bacterial, plant and mammalian cells. UDP-Glucose 4-Epimerase performs the final step in the Leloir pathway of Galactose metabolism, it 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.

### Product Info

**Amount :** 10 µg / 50 µg

**Content :** Supplied as a 0.2 µm filtered solution of 50mM TrisHCl, 150mM NaCl, 2mM DTT, 1mM EDTA, pH 8.0.

**Storage condition :** Store at -20°C, stable for 6 months after receipt. Please minimize freeze-thaw cycles.

**Amino Acid :**  
MGSSHHHHHSSGLVPRGSHMAEKVLVTGGAGYIGSHTVLEAGYLPVVIDNFHNARFGGGSL  
PESLRRVQELTGRSVEFEEMDILDQGALQRLFKKYSFMAVIHFAGLKAVGESVQKPLDYRVNLTG  
TIQLLEIMKAHGVKNLVFSSSATVYGNPQYLPDEAHPTGGCTNPYGKSFKFIEEMIRDLQCADKTW  
NAVLLRYFNPTGAHASGCIGEDPQQGIPNNLMPYVSQVAIGRREALNVFGNDYDTEDGTGVRDYIH  
VDLAKGHIAALRKLKEQCGCRIYNLGTGTGYSVLQMVQAMEKASGKKIPYKVVARREGDVAACYA  
NPSLAQEELGWTAALGLDRMCEDLWRWQKQNPSGFGTQA

### Application Note

**Endotoxin :** Less than 0.1 ng/µg (1 IEU/µg) as determined by LAL test.