Recombinant Human UDP-glucose 4-epimerase (GALE)

Product Code	CSB-BP613499HU
Abbreviation	GALE
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	Q14376
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	≥85% (SDS-PAGE)
Sequence	MAEKVLVTGG AGYIGSHTVL ELLEAGYLPV VIDNFHNAFR GGGSLPESLR RVQELTGRSV EFEEMDILDQ GALQRLFKKY SFMAVIHFAG LKAVGESVQK PLDYYRVNLT GTIQLLEIMK AHGVKNLVFS SSATVYGNPQ YLPLDEAHPT GGCTNPYGKS KFFIEEMIRD LCQADKTWNA VLLRYFNPTG AHASGCIGED PQGIPNNLMP YVSQVAIGRR EALNVFGNDY DTEDGTGVRD YIHVVDLAKG HIAALRKLKE QCGCRIYNLG TGTGYSVLQM VQAMEKASGK KIPYKVVARR EGDVAACYAN PSLAQEELGW TAALGLDRMC EDLWRWQKQN PSGFGTQA
Source	Baculovirus
Target Names	GALE
Protein Names	Recommended name: UDP-glucose 4-epimerase EC= 5.1.3.2 Alternative name(s): Galactowaldenase UDP-galactose 4-epimerase
Expression Region	1-348
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	Tag type will be determined during the manufacturing process.
Protein Length	full length protein
Target Details	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 mental retardation, with symptoms ranging from mild (peripheral form) to severe (generalized form). Multiple alternatively spliced

	transcripts encoding the same protein have been identified.
Reconstitution	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL.We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.
Shelf Life	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.