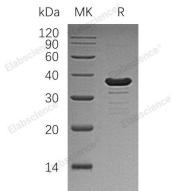
Recombinant Human GALE Protein (His Tag)

Catalog Number: PKSH033193

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description	
Species	Human
Source	E.coli-derived Human GALE protein Met 1-Ala348, with an N-terminal His
Calculated MW	40.4 kDa
Observed MW	35 kDa
Accession	Q14376
Bio-activity	Not validated for activity
Properties	
Purity	> 95 % as determined by reducing SDS-PAGE.
Concentration	Subject to label value.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Store at $< -20^{\circ}$ C, stable for 6 months. Please minimize freeze-thaw cycles.
Shipping	This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel
	packs. Upon receipt, store it immediately at $< -20^{\circ}$ C.
Formulation	Supplied as a 0.2 µm filtered solution of 50mM Tris-HCl, 150mM NaCl, 2mM DTT,
	1mM EDTA, pH 8.0.
Data	
LiD-	



> 95 % as determined by reducing SDS-PAGE.

Background

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-Gglucose 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.