



GALE mouse mAb

Catalog No	YP-mAb-11351
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	GALE
Immunogen	Synthesized peptide derived from human GALE AA range: 104-154
Specificity	This antibody detects endogenous levels of GALE at Human/Mouse/Rat
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	UDP-GlcNAc 4-epimerase;UDP-GalNAc 4-epimerase;UDP-galactose 4-epimerase;SDR1E1;GALE
Observed Band	38kD
Calculated Molecular Weight	38kD
Cell Pathway	cytosol,extracellular exosome,
Tissue Specificity	
Function	catalytic activity:UDP-glucose = UDP-galactose.,cofactor:NAD.,disease:Defects in GALE are the cause of epimerase-deficiency galactosemia (EDG) [MIM:230350]; also known as galactosemia type 3. Clinical features include early-onset cataracts, liver damage, deafness and mental retardation. There are two clinically distinct forms of EDG. (1) A benign, or 'peripheral' form with no detectable GALE activity in red blood cells and characterized by mild symptoms. Some patients may suffer no symptoms beyond raised levels of galactose-1-phosphate in the blood. (2) A much rarer 'generalized' form with undetectable levels of GALE activity in all tissues and resulting in severe features such as restricted growth and mental development.,function:Catalyzes two distinct but analogous reactions: the epimerization of UDP-glucose to UDP-galactose and the epimerization of UDP-N-acetylglucosamine to UDP-N-ace



Background

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. [provided by RefSeq, Jul 2008],

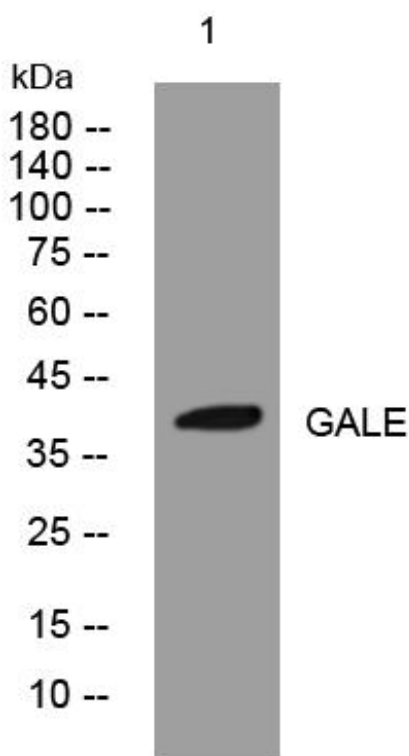
matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western Blot analysis of various cells using GALE mouse mAb