

ARG57064 anti-GALE antibody [6G10]

Package: 50 µl
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [6G10] recognizes GALE
Tested Reactivity	Hu
Tested Application	WB
Host	Mouse
Clonality	Monoclonal
Clone	6G10
Isotype	IgG1, kappa
Target Name	GALE
Species	Human
Immunogen	Recombinant fragment around aa. 1-348 of Human GALE.
Conjugation	Un-conjugated
Alternate Names	UDP-GlcNAc 4-epimerase; SDR1E1; UDP-galactose 4-epimerase; Galactowaldenase; EC 5.1.3.2; EC 5.1.3.7; UDP-N-acetylglucosamine 4-epimerase; UDP-GalNAc 4-epimerase; UDP-N-acetylgalactosamine 4-epimerase; UDP-glucose 4-epimerase

Application Instructions

Application table	Application	Dilution
	WB	1:500 - 1:1000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

Properties

Form	Liquid
Purification	Purification with Protein A.
Buffer	PBS (pH 7.4), 0.02% Sodium azide and 10% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	10% Glycerol
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Database links

[GeneID: 2582 Human](#)

[Swiss-port # Q14376 Human](#)

Gene Symbol

GALE

Gene Full Name

UDP-galactose-4-epimerase

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]

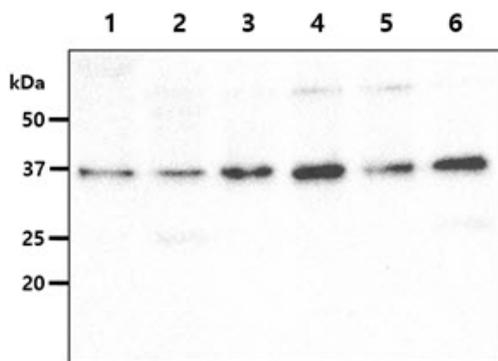
Function

Catalyzes two distinct but analogous reactions: the reversible epimerization of UDP-glucose to UDP-galactose and the reversible epimerization of UDP-N-acetylglucosamine to UDP-N-acetylgalactosamine. The reaction with UDP-Gal plays a critical role in the Leloir pathway of galactose catabolism in which galactose is converted to the glycolytic intermediate glucose 6-phosphate. It contributes to the catabolism of dietary galactose and enables the endogenous biosynthesis of both UDP-Gal and UDP-GalNAc when exogenous sources are limited. Both UDP-sugar interconversions are important in the synthesis of glycoproteins and glycolipids. [UniProt]

Calculated Mw

38 kDa

Images



ARG57064 anti-GALE antibody [6G10] WB image

Western blot: 40 µg of 1) MCF7 cell lysate, 2) Jurkat cell lysate, 3) A431 cell lysate, 4) A549 cell lysate, 5) HeLa cell lysate, 6) HepG2 cell lysate stained with ARG57064 anti-GALE antibody [6G10] at 1:1000.