

Product datasheet

info@arigobio.com

ARG40802 anti-GALE antibody

Package: 100 μl Store at: -20°C

Summary

Product Description Rabbit Polyclonal antibody recognizes GALE

Tested Reactivity Hu, Ms, Rat

Tested Application IHC-P, WB

Host Rabbit

Clonality Polyclonal

Isotype IgG

Target Name GALE

Species Human

Immunogen Recombinant fusion protein corresponding to aa. 129-348 of Human GALE (NP_001121093.1).

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
	IHC-P	1:50 - 1:200
	WB	1:500 - 1:2000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	HeLa	
Observed Size	36 kDa	

Properties

Form Liquid

Purification Affinity purified.

Buffer PBS (pH 7.3), 0.02% Sodium azide and 50% Glycerol.

Preservative 0.02% Sodium azide

Stabilizer 50% Glycerol

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.

Bioinformation

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]

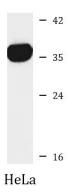
Function

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



ARG40802 anti-GALE antibody WB image

Western blot: $25~\mu g$ of HeLa cell lysate stained with ARG40802 anti-GALE antibody at 1:1000 dilution.