

Product datasheet

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ARG40828 anti-GALE antibody

Package: 50 μg 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 protein corresponding to M1-N340 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
	IHC-P	1:200 - 1:1000
	WB	1:500 - 1:2000
Application Note	IHC-P: Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0, epitope retrieval solution) for 20 min. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

Properties

Form Liquid

Buffer 0.2% Na2HPO4, 0.9% NaCl, 0.05% Sodium azide and 4% Trehalose.

Preservative 0.05% Sodium azide

Stabilizer 4% Trehalose
Concentration 0.5 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 or below. 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

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]

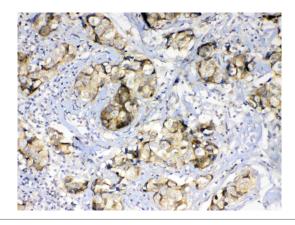
Function

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



ARG40828 anti-GALE antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human mammary cancer tissue. Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0, epitope retrieval solution) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG40828 anti-GALE antibody at 1 $\mu g/ml$, overnight at 4°C.

80 -30 -

95 -

72 -

55 -43 -

34-

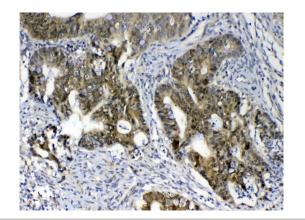
26-

17-

Rat liver

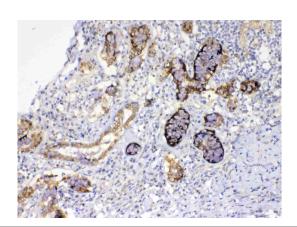
ARG40828 anti-GALE antibody WB image

Western blot: 50 μg of sample under reducing conditions. Rat liver lysate stained with ARG40828 anti-GALE antibody at 0.5 $\mu g/ml$, overnight at 4°C.



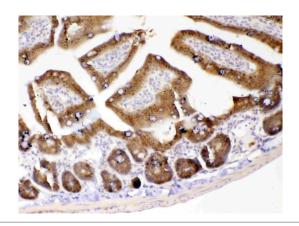
ARG40828 anti-GALE antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human colon cancer tissue. Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0, epitope retrieval solution) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG40828 anti-GALE antibody at 1 $\mu g/ml$, overnight at 4°C.



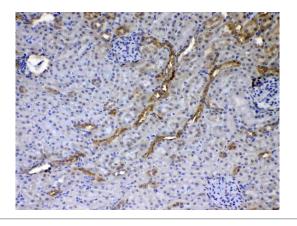
ARG40828 anti-GALE antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human lung cancer tissue. Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0, epitope retrieval solution) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG40828 anti-GALE antibody at 1 $\mu g/ml$, overnight at 4°C.



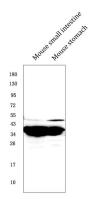
ARG40828 anti-GALE antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Mouse intestine tissue. Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0, epitope retrieval solution) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG40828 anti-GALE antibody at 1 $\mu g/ml$, overnight at 4°C.



ARG40828 anti-GALE antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Rat kidney tissue. Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0, epitope retrieval solution) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG40828 anti-GALE antibody at 1 μ g/ml, overnight at 4°C.



ARG40828 anti-GALE antibody WB image

Western blot: 50 μg of samples under reducing conditions. Mouse small intestine and Mouse stomach lysates stained with ARG40828 anti-GALE antibody at 0.5 $\mu g/ml$, overnight at 4°C.