

# 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	solution) for 20 min.	ediation was performed in Citrate buffer (pH 6.0, epitope retrieval ended starting dilutions and the optimal dilutions or concentrations entist.

## **Properties**

Note	For laboratory research only, not for drug, diagnostic or other use.
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.
Concentration	0.5 mg/ml
Stabilizer	4% Trehalose
Preservative	0.05% Sodium azide
Buffer	0.2% Na2HPO4, 0.9% NaCl, 0.05% Sodium azide and 4% Trehalose.
Form	Liquid

# 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.



### ARG40828 anti-GALE antibody WB image

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





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  $\mu$ g/ml, overnight at 4°C.



### ARG40828 anti-GALE antibody WB image

Western blot: 50  $\mu g$  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.