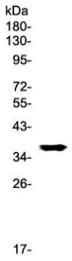
GALE Antibody / UDP-glucose 4-epimerase (RQ4034)

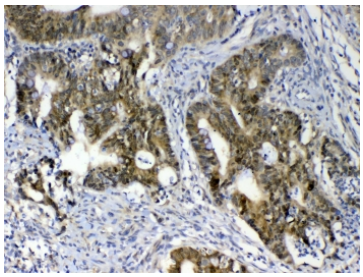
Catalog No.	Formulation	Size
RQ4034	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

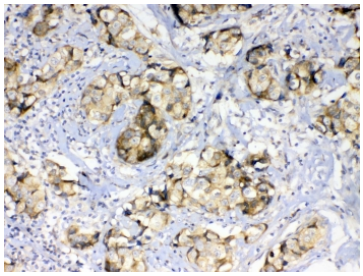
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose and 0.025% sodium azide
UniProt	Q14376
Localization	Nuclear, cytoplasmic
Applications	Western Blot: 0.5-1ug/ml IHC (FFPE): 1-2ug/ml Direct ELISA: 0.1-0.5ug/ml
Limitations	This GALE antibody is available for research use only.



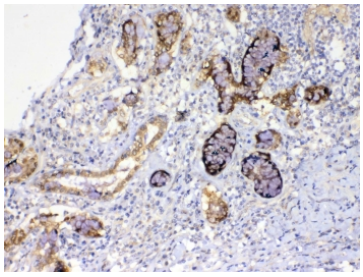
Western blot testing of rat liver lysate with GALE antibody at 0.5ug/ml. Predicted molecular weight ~38 kDa.



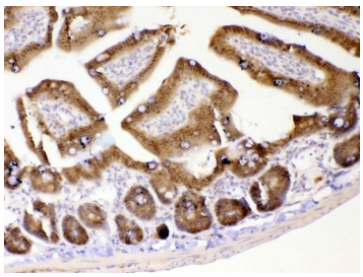
IHC testing of FFPE human colon cancer tissue with GALE antibody at 1ug/ml. Required HIER: steam section in pH6 citrate buffer for 20 min and allow to cool prior to testing.



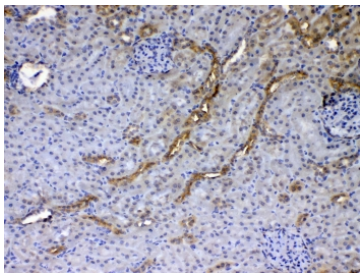
IHC testing of FFPE human breast cancer tissue with GALE antibody at 1ug/ml. Required HIER: steam section in pH6 citrate buffer for 20 min and allow to cool prior to testing.



IHC testing of FFPE human lung cancer tissue with GALE antibody at 1ug/ml. Required HIER: steam section in pH6 citrate buffer for 20 min and allow to cool prior to testing.



IHC testing of FFPE mouse intestine tissue with GALE antibody at 1ug/ml. Required HIER: steam section in pH6 citrate buffer for 20 min and allow to cool prior to testing.



IHC testing of FFPE rat kidney tissue with GALE antibody at 1ug/ml. Required HIER: steam section in pH6 citrate buffer for 20 min and allow to cool prior to testing.

Description

The enzyme UDP-glucose 4-epimerase, also known as UDP-galactose 4-epimerase or GALE, is a homodimeric epimerase found in bacterial, fungal, plant, and mammalian cells. 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.

Application Notes

Optimal dilution of the GALE antibody should be determined by the researcher.

Immunogen

A recombinant human partial protein corresponding to amino acids M1-N340 was used as the immunogen for the GALE antibody.

Storage

After reconstitution, the GALE antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

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