



Anti-GALE monoclonal antibody (DCABH-11662)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Antigen Description 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.

Immunogen	A synthetic peptide of human GALE is used for rabbit immunization.
Isotype	IgG
Source/Host	Rabbit
Species Reactivity	Mouse, Rat, Human
Purification	Protein A
Conjugate	Unconjugated
Applications	FC, IP, WB
Size	100 µl
Buffer	Preservative: 0.01% Sodium azide Constituents: 9% PBS, 40% Glycerol, 0.05% BSA, 50% Tissue culture supernatant,

Preservative	None
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

GENE INFORMATION

Gene Name	GALE UDP-galactose-4-epimerase [Homo sapiens]
Official Symbol	GALE
Synonyms	GALE; UDP-galactose-4-epimerase; galactose 4 epimerase, UDP; UDP-glucose 4-epimerase; SDR1E1; short chain dehydrogenase/reductase family 1E; member 1; UDP glucose 4 epimerase; galactowaldenase; UDP-galactose 4-epimerase; UDP galactose-4-epimerase; galactose-4-epimerase, UDP-; short chain dehydrogenase/reductase family 1E, member 1; FLJ95174; FLJ97302;
Entrez Gene ID	2582
Protein Refseq	NP_000394
UniProt ID	Q14376
Chromosome Location	1p36-p35
Pathway	Amino sugar and nucleotide sugar metabolism, organism-specific biosystem; Amino sugar and nucleotide sugar metabolism, conserved biosystem; Galactose catabolism, organism-specific biosystem; Galactose metabolism, organism-specific biosystem; Galactose metabolism, conserved biosystem; Metabolic pathways, organism-specific biosystem; Metabolism, organism-specific biosystem.
Function	UDP-glucose 4-epimerase activity; UDP-glucose 4-epimerase activity; UDP-glucose 4-epimerase activity; catalytic activity; coenzyme binding; isomerase activity; nucleotide binding; protein homodimerization activity;