

Product datasheet for **TA502146AM**

GALE Mouse Monoclonal Antibody (Biotin conjugated) [Clone ID: OTI1C4]

Product data:

Product Type:	Primary Antibodies
Clone Name:	OTI1C4
Applications:	IHC, WB
Recommended Dilution:	WB 1:500~2000, IHC 1:150
Reactivity:	Human, Dog, Rat, Monkey, Mouse
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Full length human recombinant protein of human GALE (NP_000394) produced in HEK293T cell.
Formulation:	PBS (pH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide.
Concentration:	0.5 mg/ml
Purification:	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
Conjugation:	Biotin
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	38.1 kDa
Gene Name:	UDP-galactose-4-epimerase
Database Link:	NP_000394 Entrez Gene 74246 Mouse Entrez Gene 114860 Rat Entrez Gene 100855555 Dog Entrez Gene 710553 Monkey Entrez Gene 2582 Human Q14376

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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]

Synonyms:

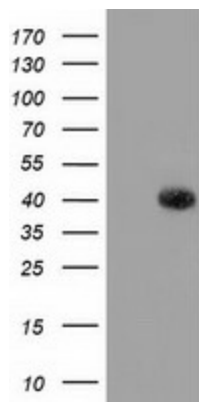
SDR1E1

Protein Families:

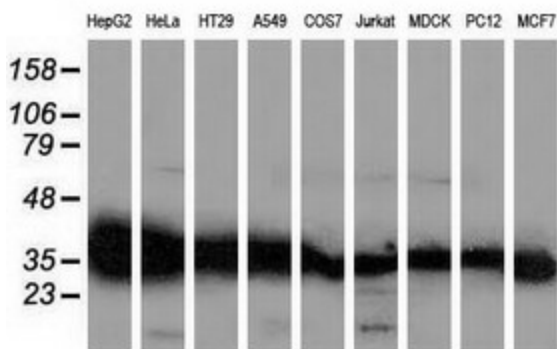
Druggable Genome

Protein Pathways:

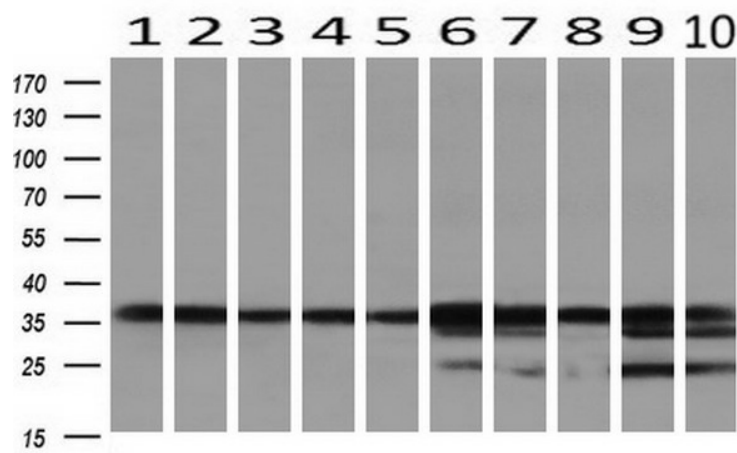
Amino sugar and nucleotide sugar metabolism, Galactose metabolism, Metabolic pathways

Product images:


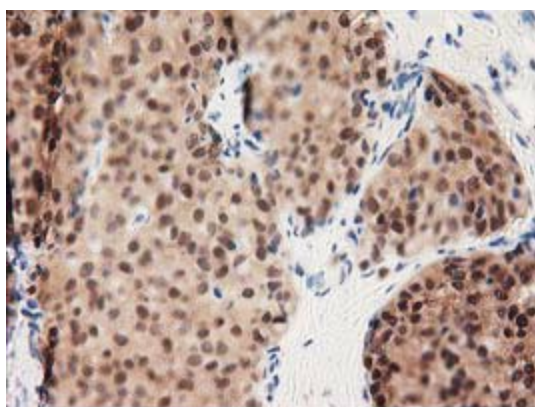
HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY GALE (Cat# [RC201561], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-GALE (Cat# [TA502146]). Positive lysates [LY424739] (100ug) and [LC424739] (20ug) can be purchased separately from OriGene.



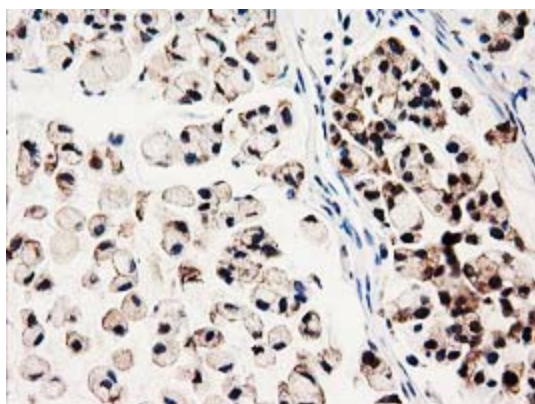
Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-GALE monoclonal antibody (HepG2: human; HeLa: human; SVT2: mouse; A549: human; COS7: monkey; Jurkat: human; MDCK: canine; PC12: rat; MCF7: human).



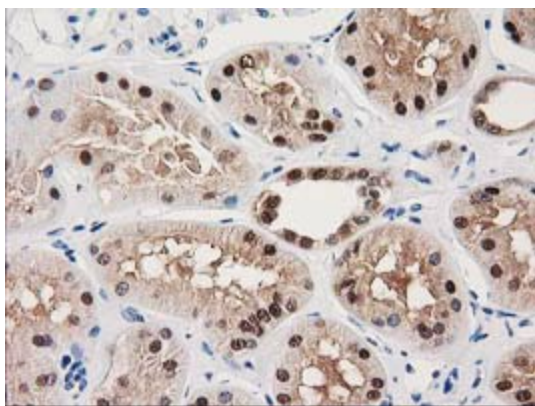
Western blot analysis of extracts (10ug) from 10 Human tissue by using anti-GALE monoclonal antibody at 1:200 (1: Testis; 2: Omentum; 3: Uterus; 4: Breast; 5: Brain; 6: Liver; 7: Ovary; 8: Thyroid gland; 9: colon; 10: spleen).



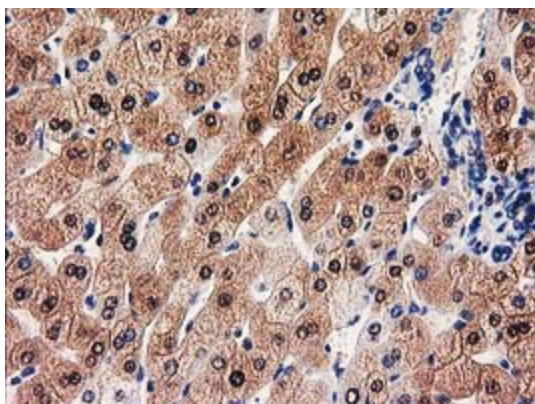
Immunohistochemical staining of paraffin-embedded Adenocarcinoma of Human breast tissue using anti-GALE mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA502146])



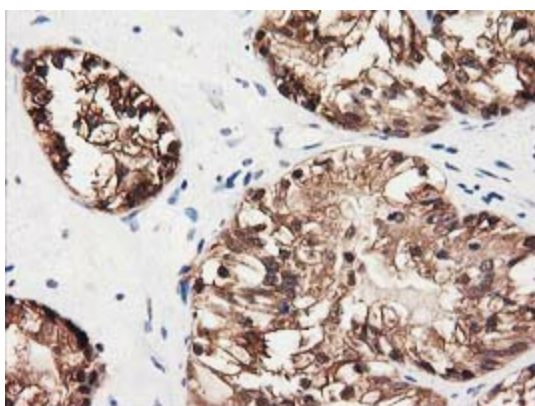
Immunohistochemical staining of paraffin-embedded Adenocarcinoma of Human colon tissue using anti-GALE mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA502146])



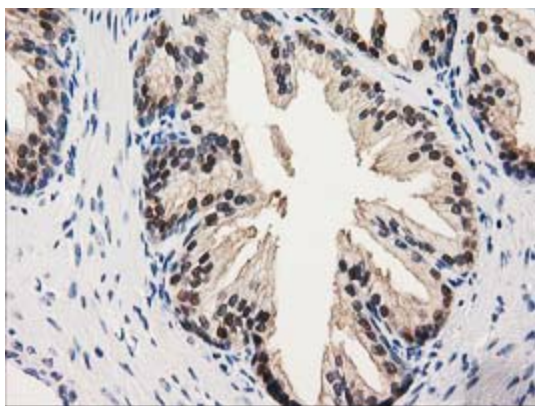
Immunohistochemical staining of paraffin-embedded Human Kidney tissue within the normal limits using anti-GALE mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA502146])



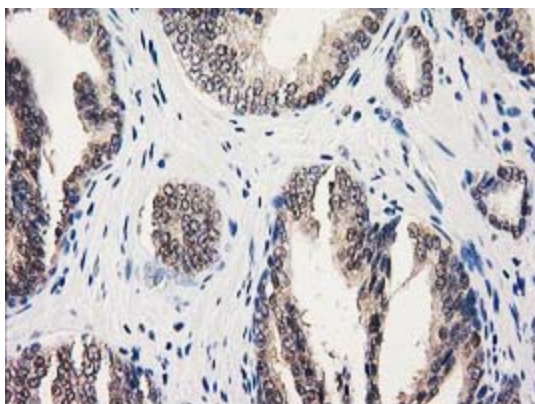
Immunohistochemical staining of paraffin-embedded Human liver tissue within the normal limits using anti-GALE mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA502146])



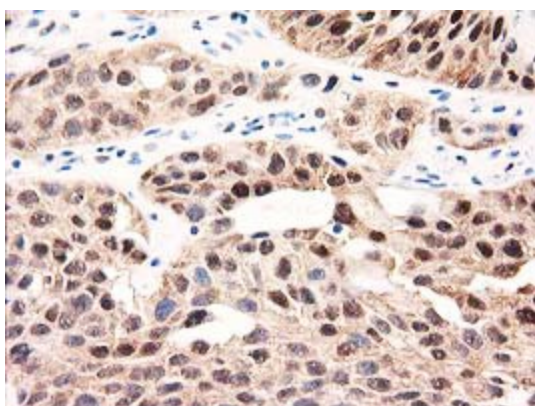
Immunohistochemical staining of paraffin-embedded Adenocarcinoma of Human ovary tissue using anti-GALE mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA502146])



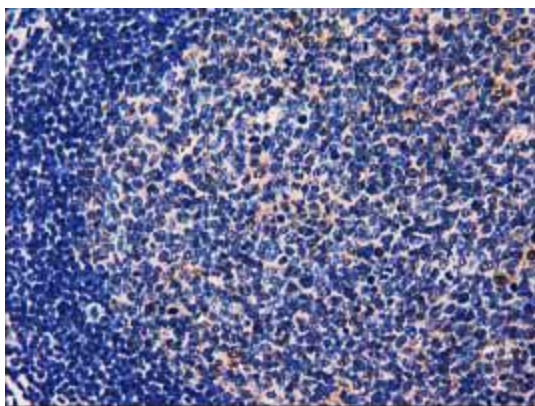
Immunohistochemical staining of paraffin-embedded Human prostate tissue within the normal limits using anti-GALE mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA502146])



Immunohistochemical staining of paraffin-embedded Carcinoma of Human prostate tissue using anti-GALE mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA502146])



Immunohistochemical staining of paraffin-embedded Carcinoma of Human bladder tissue using anti-GALE mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA502146])



Immunohistochemical staining of paraffin-embedded Human lymph node tissue within the normal limits using anti-GALE mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA502146])