

OriGene Technologies, Inc.

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Product datasheet for TA502146

GALE Mouse Monoclonal Antibody [Clone ID: OTI1C4]

Product data:

Product Type: Primary Antibodies

Clone Name: OTI1C4
Applications: IHC, WB

Reactivity: WB 1:500~2000, IHC 1:150 **Human, Monkey, Rat, Dog**

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: 1 mg/ml

Purification: Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography

(protein A/G)

Predicted Protein Size: 38.1 kDa

Gene Name: UDP-galactose-4-epimerase

Database Link: NP 000394 Entrez Gene 114860 RatEntrez Gene 100855555 DogEntrez Gene 710553

MonkeyEntrez Gene 2582 Human

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]

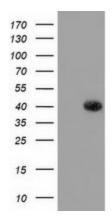


Synonyms: SDR1E1

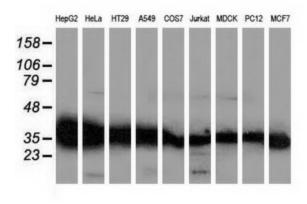
Protein Families: Druggable Genome

Protein Pathways: Amino sugar and nucleotide sugar metabolism, Galactose metabolism, Metabolic pathways

Product images:

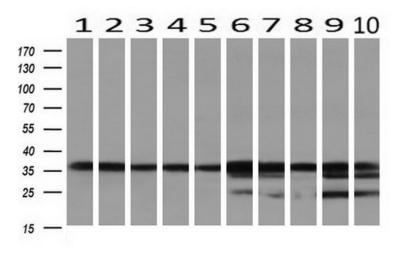


HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY GALE ([RC201561], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-GALE. Positive lysates [LY424739] (100ug) and [LC424739]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

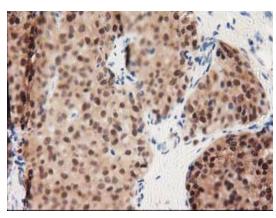


Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-GALE monoclonal antibody (HepG2: human; HeLa: human; SVT2: mouse; A549: human; COS7: monkey; Jurkat: human; MDCK: canine; PC12: rat; MCF7: human).

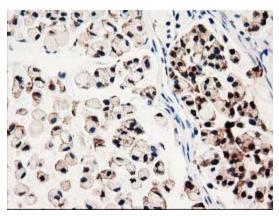




Western blot analysis of extracts (10ug) from 10 Human tissue by using anti-GALE monoclonal antibody at 1:200 (1: Testis; 2: Omentum; 3: Uterus; 4: Breast; 5: Brain; 6: Liver; 7: Ovary; 8: Thyroid gland; 9: colon;10: spleen).

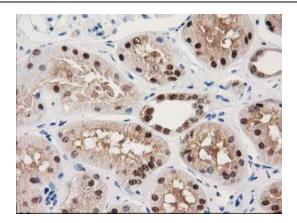


Immunohistochemical staining of paraffinembedded Adenocarcinoma of Human breast tissue using anti-GALE mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA502146)

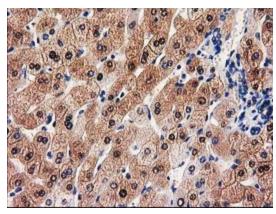


Immunohistochemical staining of paraffinembedded Adenocarcinoma of Human colon tissue using anti-GALE mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA502146)

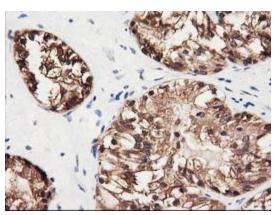




Immunohistochemical staining of paraffinembedded Human Kidney tissue within the normal limits using anti-GALE mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA502146)

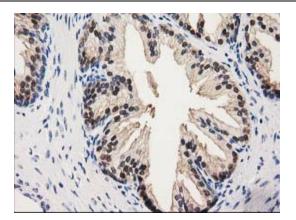


Immunohistochemical staining of paraffinembedded Human liver tissue within the normal limits using anti-GALE mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA502146)

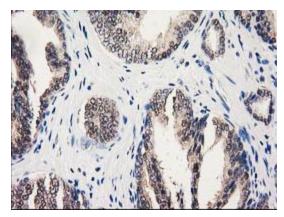


Immunohistochemical staining of paraffinembedded Adenocarcinoma of Human ovary tissue using anti-GALE mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA502146)

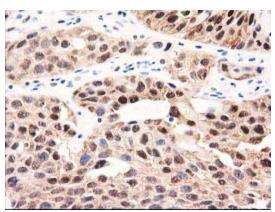




Immunohistochemical staining of paraffinembedded Human prostate tissue within the normal limits using anti-GALE mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA502146)

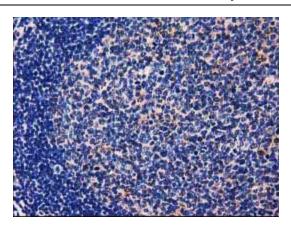


Immunohistochemical staining of paraffinembedded Carcinoma of Human prostate tissue using anti-GALE mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, TA502146)



Immunohistochemical staining of paraffinembedded 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 paraffinembedded 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)