

## Product datasheet for **TA502146S**

### GALE Mouse Monoclonal Antibody [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:          | 1 mg/ml   |
| Purification:           | Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)   |
| Conjugation:            | Unconjugated  |
| 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:          | <a href="#">NP_000394</a><br><a href="#">Entrez Gene 74246 Mouse</a> <a href="#">Entrez Gene 114860 Rat</a> <a href="#">Entrez Gene 100855555 Dog</a> <a href="#">Entrez Gene 710553 Monkey</a> <a href="#">Entrez Gene 2582 Human Q14376</a> |



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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:**

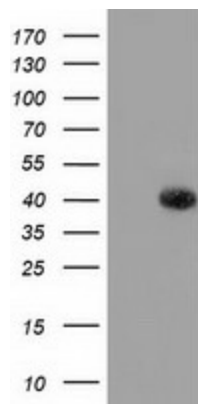
SDR1E1

**Protein Families:**

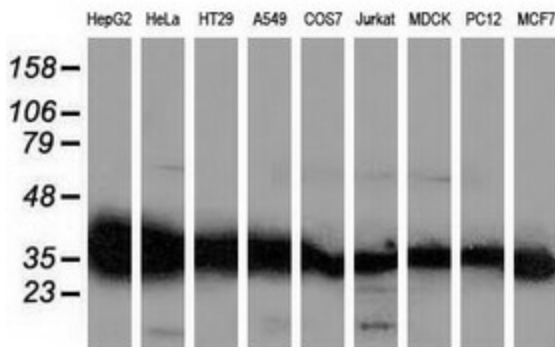
Druggable Genome

**Protein Pathways:**

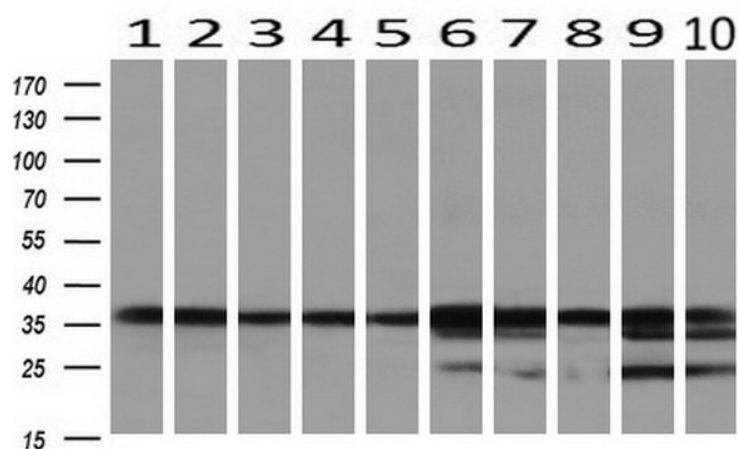
Amino sugar and nucleotide sugar metabolism, Galactose metabolism, Metabolic pathways

**Product images:**


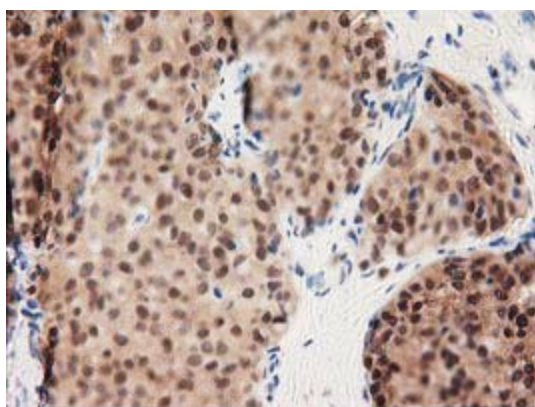
HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY GALE (Cat# [RC201561], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-GALE (Cat# [TA502146]). Positive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



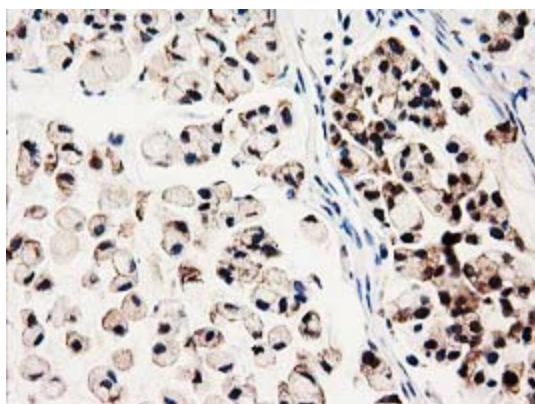
Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-GALE monoclonal antibody (HepG2: human; HeLa: human; SVT2: mouse; A549: human; COS7: monkey; Jurkat: human; MDCK: canine; PC12: rat; MCF7: human).



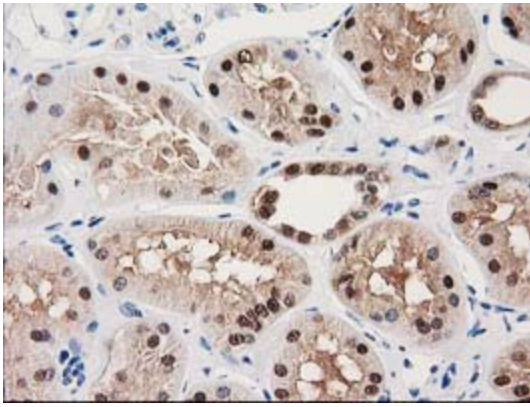
Western blot analysis of extracts (10ug) from 10 Human tissue by using anti-GALE monoclonal antibody at 1:200 (1: Testis; 2: Omentum; 3: Uterus; 4: Breast; 5: Brain; 6: Liver; 7: Ovary; 8: Thyroid gland; 9: colon;10: spleen).



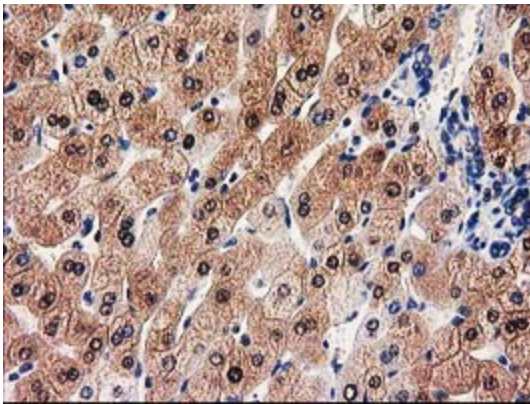
Immunohistochemical staining of paraffin-embedded Adenocarcinoma of Human breast tissue using anti-GALE mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA502146])



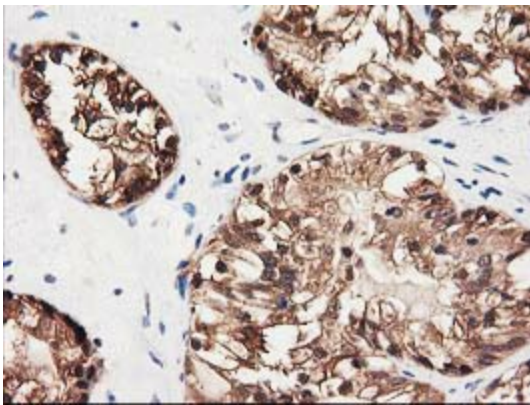
Immunohistochemical staining of paraffin-embedded Adenocarcinoma of Human colon tissue using anti-GALE mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA502146])



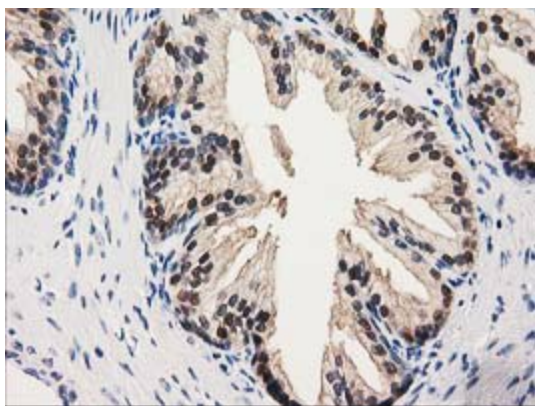
Immunohistochemical staining of paraffin-embedded Human Kidney tissue within the normal limits using anti-GALE mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA502146])



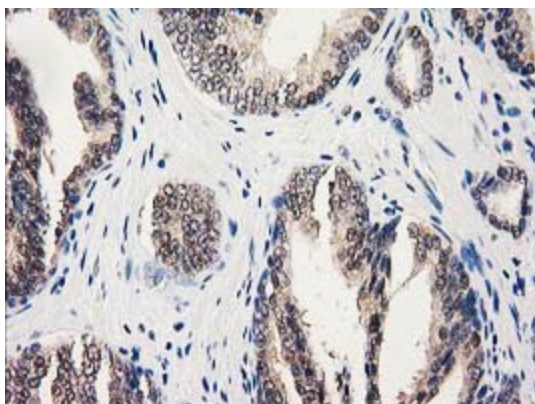
Immunohistochemical staining of paraffin-embedded Human liver tissue within the normal limits using anti-GALE mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA502146])



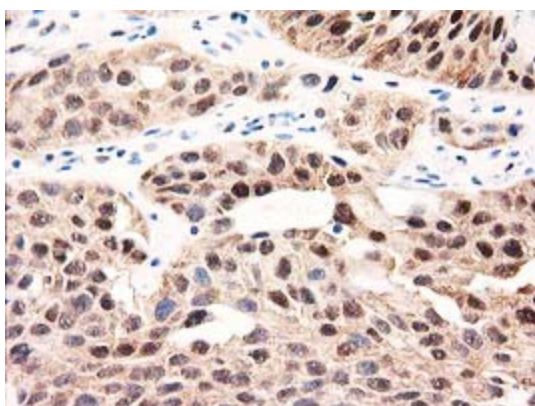
Immunohistochemical staining of paraffin-embedded Adenocarcinoma of Human ovary tissue using anti-GALE mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA502146])



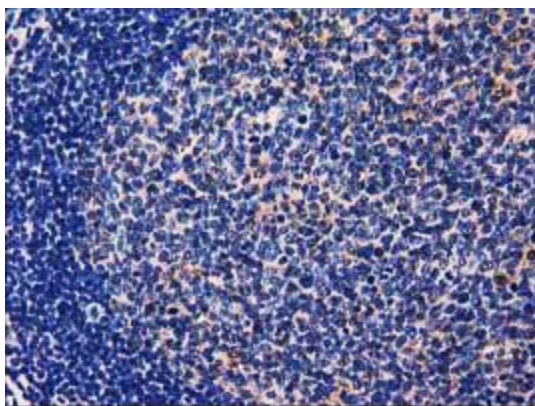
Immunohistochemical staining of paraffin-embedded Human prostate tissue within the normal limits using anti-GALE mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA502146])



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])