

## Rabbit anti-Human UDP-glucose 4-epimerase Polyclonal Antibody | anti-GALE antibody

Rabbit anti-human UDP-glucose 4-epimerase polyclonal Antibody

| CATALOG # | HOST   | REACTIVITY | APPLICATIONS                                                  |
|-----------|--------|------------|---------------------------------------------------------------|
| AAA230566 | Rabbit | Human      | Immunofluorescence, Immunohistochemistry, Western Blot, ELISA |

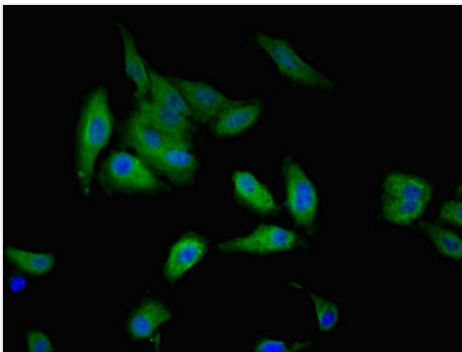
### PRODUCT SYNONYMS

UDP-glucose 4-epimerase; Polyclonal Antibody; Rabbit anti-human UDP-glucose 4-epimerase polyclonal Antibody; UDP-glucose 4-epimerase (EC 5.1.3.2) (Galactowaldenase) (UDP-Nacetylgalactosamine 4-epimerase) (UDP-GalNAc 4-epimerase) (UDP-Nacetylglucosamine 4-epimerase) (UDP-GlcNAc 4-epimerase) (EC 5.1.3.7) (UDP-galactose 4-epimerase); GALE; anti-GALE antibody

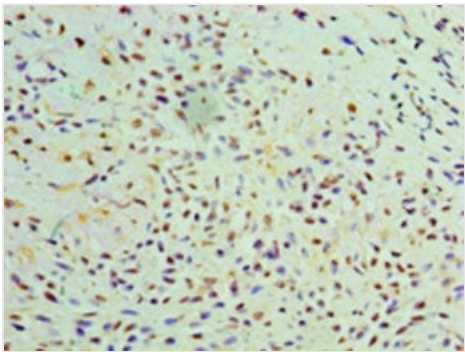
### PRODUCT SPECIFICATIONS

|                                                |                                                                                            |
|------------------------------------------------|--------------------------------------------------------------------------------------------|
| Host                                           | Rabbit                                                                                     |
| Reactivity                                     | Human                                                                                      |
| Clonality                                      | Polyclonal                                                                                 |
| Isotype                                        | IgG                                                                                        |
| Purity/Purification                            | >95%, Protein G purified                                                                   |
| Form/Format                                    | Liquid                                                                                     |
| Sequence Length                                | 348                                                                                        |
| Applicable Applications for anti-GALE antibody | IF (Immunofluorescence), IHC (Immunohistochemistry), WB (Western Blot), ELISA              |
| Immunogen                                      | Recombinant human UDP-glucose 4-epimerase protein(1-348aa)                                 |
| Immunogen Species                              | Homo sapiens (Human)                                                                       |
| Research Area                                  | Signal Transduction                                                                        |
| Target Names                                   | GALE                                                                                       |
| Conjugation                                    | Non-conjugated                                                                             |
| Storage Buffer                                 | Preservative: 0.03% Proclin 300;<br>Constituents: 50% Glycerol, 0.01M PBS, PH 7.4          |
| Santa Cruz Alternative                         | Potential replacement for Santa Cruz Biotechnology antibody catalog# sc-160058 / sc-160060 |
| Preparation and Storage                        | Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.                              |

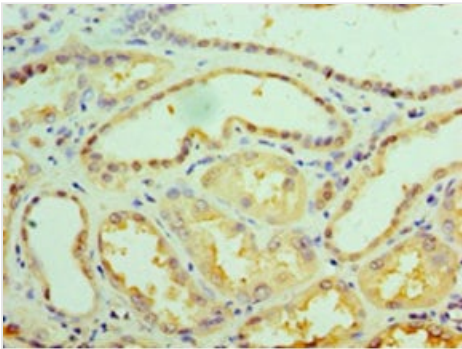
IMAGES



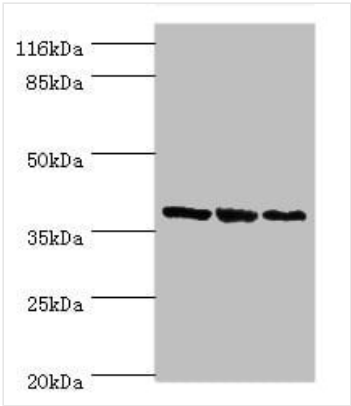
**IF (Immunofluorescence)**  
Immunofluorescent analysis of HeLa cells using AAA230566 at a dilution of 1:100 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L)



**IHC (Immunohistochemistry)**  
Immunohistochemistry of paraffin-embedded human breast cancer using AAA230566 at dilution 1:100



**IHC (Immunohistochemistry)**  
Immunohistochemistry of paraffin-embedded human kidney using AAA230566 at dilution 1:100



**WB (Western Blot)**  
Western blotAll lanes: UDP-glucose 4-epimerase antibody at 2ug/mlLane 1: HepG2 cellsLane 2: HeLa cellsLane 3: A549 cellsSecondaryGoat polyclonal to rabbit at 1/10000 dilutionPredicted band size: 39,31 kDaObserved band size: 38 kDa

ADDITIONAL INFORMATION

|                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|----------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Related Product Information for anti-<br/>GALE antibody</b> | <p>Catalyzes two distinct but analogous reactions: the reversible epimerization of UDP-glucose to UDP-galactose and the reversible epimerization of UDP-N-acetylglucosamine to UDP-N-acetylgalactosamine. The reaction with UDP-Gal plays a critical role in the Leloir pathway of galactose catabolism in which galactose is converted to the glycolytic intermediate glucose 6-phosphate. It contributes to the catabolism of dietary galactose and enables the endogenous biosynthesis of both UDP-Gal and UDP-GalNAc when exogenous sources are limited. Both UDP-sugar interconversions are important in the synthesis of glycoproteins and glycolipids.</p> <p>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.</p> |
|----------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

NCBI AND UNIPROT INFORMATION

|                  |             |
|------------------|-------------|
| NCBI GI #        | 56237023    |
| NCBI GeneID      | 2582        |
| NCBI Accession # | NP_000394.2 |

|                                  |                                                            |
|----------------------------------|------------------------------------------------------------|
| NCBI GenBank Nucleotide #        | NM_000403.3                                                |
| UniProt Accession #              | Q14376; Q38G75; Q86W41; Q9BVE3; Q9UJB4; A0A024RAH5; B3KQ39 |
| Molecular Weight                 | 30,180 Da                                                  |
| NCBI Official Full Name          | UDP-glucose 4-epimerase                                    |
| NCBI Official Synonym Full Names | UDP-galactose-4-epimerase                                  |
| NCBI Official Symbol             | GALE                                                       |
| NCBI Official Synonym Symbols    | SDR1E1                                                     |
| NCBI Protein Information         | UDP-glucose 4-epimerase                                    |
| UniProt Protein Name             | UDP-glucose 4-epimerase                                    |
| UniProt Gene Name                | GALE                                                       |
| UniProt Synonym Gene Names       | UDP-GlcNAc 4-epimerase                                     |
| UniProt Entry Name               | GALE_HUMAN                                                 |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/udp-glucose-4-epimerase-antibody-immunofluorescence-immunohistochemistry-western-blot-elisa/230566>