

GALE Antibody (Center) Blocking Peptide
Synthetic peptide
Catalog # BP6902c**Specification**

GALE Antibody (Center) Blocking Peptide - Product InformationPrimary Accession [Q14376](#)**GALE Antibody (Center) Blocking Peptide - Additional Information****Gene ID** 2582**Other Names**

UDP-glucose 4-epimerase, Galactowaldenase, UDP-N-acetylgalactosamine 4-epimerase, UDP-GalNAc 4-epimerase, UDP-N-acetylglucosamine 4-epimerase, UDP-GlcNAc 4-epimerase, UDP-galactose 4-epimerase, GALE ([HGNC:4116](http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=4116))

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP6902c](/products/AP6902c) was selected from the Center region of human GALE. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

GALE Antibody (Center) Blocking Peptide - Protein Information**Name** GALE ([HGNC:4116](#))**Function**

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.

GALE Antibody (Center) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

GALE Antibody (Center) Blocking Peptide - Images

GALE Antibody (Center) Blocking Peptide - Background

UDP-galactose-4-epimerase 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.

GALE Antibody (Center) Blocking Peptide - References

Openo, K.K., et.al., Am. J. Hum. Genet. 78 (1), 89-102 (2006)