

**Lactalbumin Antibody**  
**Purified Rabbit Polyclonal Antibody**  
**Catalog # ABV11646****Specification**

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**Lactalbumin Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">P00709</a>
Host	Rabbit
Clonality	Polyclonal
Isotype	rabbit IgG
Calculated MW	16225

**Lactalbumin Antibody - Additional Information****Gene ID** 3906**Other Names**

Lactalbumin, Human Milk

**Target/Specificity**

Lactalbumin

**Formulation**

100 µg (0.5 mg/ml) of antibody in PBS pH 7.2, 0.01 % BSA, 0.03 % ProClin®, and 50 % glycerol.

**Handling**

The antibody solution should be gently mixed before use.

**Background Descriptions****Precautions**

Lactalbumin Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Lactalbumin Antibody - Protein Information****Name** LALBA**Synonyms** LYZL7**Function**

Regulatory subunit of lactose synthase, changes the substrate specificity of galactosyltransferase in the mammary gland making glucose a good acceptor substrate for this enzyme. This enables LS to synthesize lactose, the major carbohydrate component of milk. In other tissues, galactosyltransferase transfers galactose onto the N- acetylglucosamine of the oligosaccharide chains in glycoproteins.

**Cellular Location**

Secreted.

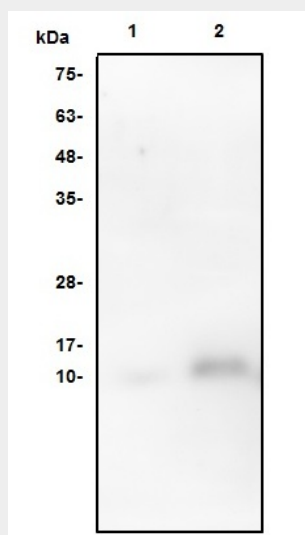
**Tissue Location**

Mammary gland specific. Secreted in milk.

**Lactalbumin Antibody - Protocols**

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Lactalbumin Antibody - Images**

Western blot with human Lactalbumin antibody: Lane1: 10ug h Lactalbumin; Lane2: 50ug h Lactalbumin.

**Lactalbumin Antibody - Background**

$\alpha$ -Lactalbumin is an important whey protein in cow's milk, and is also present in the milk of many other mammalian species. In primates, alpha-lactalbumin expression is upregulated in response to the hormone prolactin and increases the production of lactose.  $\alpha$ -Lactalbumin forms the regulatory subunit of the lactose synthase (LS) heterodimer and  $\beta$ -1,4-galactosyltransferase (beta4Gal-T1) forms the catalytic component. Together, these proteins enable LS to produce lactose by transferring galactose moieties to glucose. As a monomer, alpha-lactalbumin strongly binds calcium and zinc ions and may possess bactericidal or antitumor activity. When formed into a complex with Gal-T1, a galactosyltransferase,  $\alpha$ -lactalbumin, enhances the enzyme's affinity for glucose by about 1000 times, and inhibits the ability to polymerize multiple galactose units. This gives rise to a pathway for forming lactose by converting Gal-TI to Lactose synthase.