

**LALBA Antibody (Center)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP14834c**

**Specification**

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**LALBA Antibody (Center) - Product Information**

Application	<b>WB, IHC-P,E</b>
Primary Accession	<a href="#">P00709</a>
Other Accession	<a href="#">NP_002280.1</a>
Reactivity	<b>Human</b>
Host	<b>Rabbit</b>
Clonality	<b>Polyclonal</b>
Isotype	<b>Rabbit IgG</b>
Antigen Region	<b>39-68</b>

**LALBA Antibody (Center) - Additional Information**

**Gene ID** 3906

**Other Names**

Alpha-lactalbumin, Lactose synthase B protein, Lysozyme-like protein 7, LALBA, LYZL7

**Target/Specificity**

This LALBA antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 39-68 amino acids from the Central region of human LALBA.

**Dilution**

WB~~1:2000

IHC-P~~1:25

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

LALBA Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

**LALBA Antibody (Center) - 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**

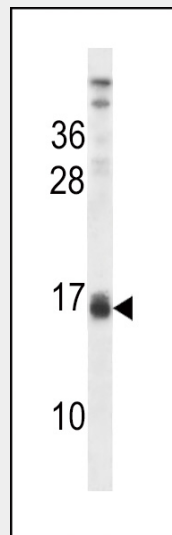
Mammary gland specific. Secreted in milk.

**LALBA Antibody (Center) - Protocols**

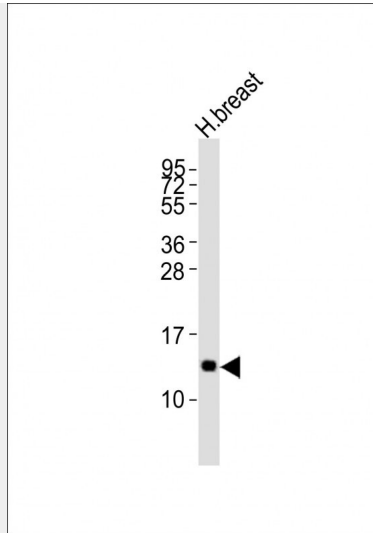
Provided below are standard protocols that you may find useful for product applications.

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

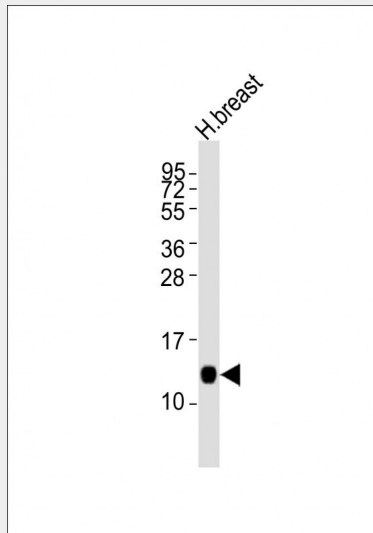
**LALBA Antibody (Center) - Images**



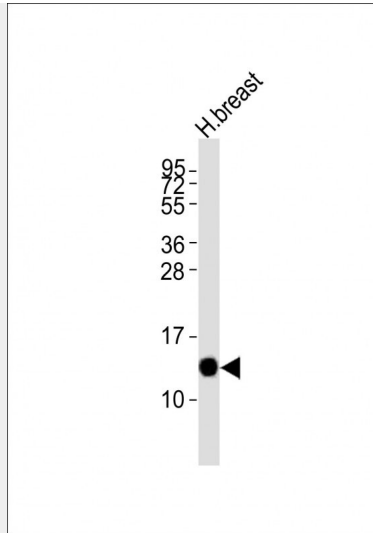
LALBA Antibody (Center) (Cat. #AP14834c) western blot analysis in CEM cell line lysates (35ug/lane). This demonstrates the LALBA antibody detected the LALBA protein (arrow).



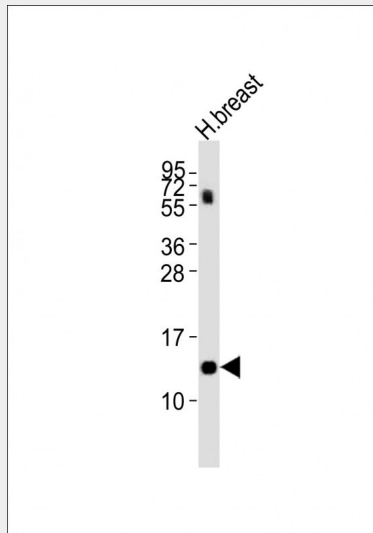
Anti-LALBA Antibody (Center) at 1:2000 dilution + human breast lysates Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 16 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



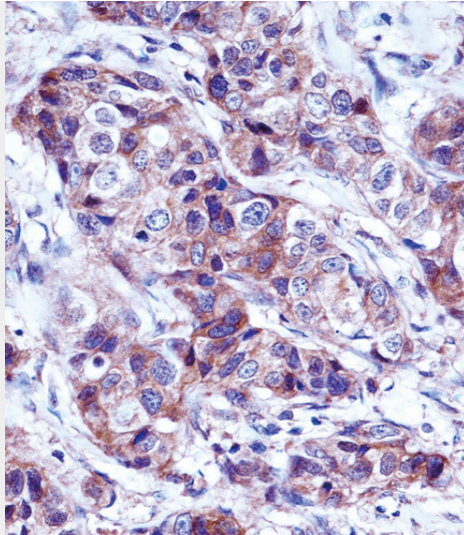
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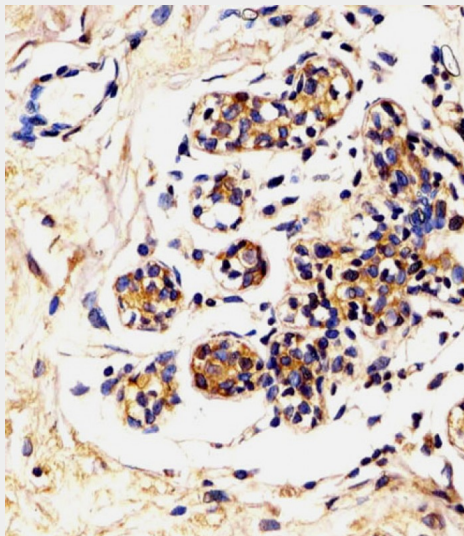
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LALBA Antibody (Center) (AP14834c) immunohistochemistry analysis in formalin fixed and paraffin embedded human breast carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of LALBA Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.



AP14834c staining LALBA in Human breast tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 0.5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody (1/25) for 1 hours at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.

### **LALBA Antibody (Center) - Background**

This gene encodes alpha-lactalbumin, a principal protein of milk. 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. A folding variant of alpha-lactalbumin, called HAMLET, likely induces apoptosis in tumor

and immature cells.

#### **LALBA Antibody (Center) - References**

- Tolin, S., et al. FEBS J. 277(1):163-173(2010)  
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Wang, J., et al. J. Dairy Sci. 91(12):4466-4476(2008)  
Ramboarina, S., et al. J. Am. Chem. Soc. 130(46):15318-15326(2008)  
Morozova, O.B., et al. J Phys Chem B 109(12):5912-5918(2005)