

Mouse Anti-alpha Lactalbumin antibody

SLM-33090M

Product Name	alpha Lactalbumin
Chinese Name	α -乳清蛋白单克隆抗体
Alias	a-LACTA; alfaLA; Alpha-lactalbumin; Lactalbumin alpha; Lactose synthase B protein; LALBA; LALBA_HUMAN; Lysozyme-like protein 7; LYZL7.
Research Area	Tumour Cell biology
Immunogen Species	Mouse
Clonality	Monoclonal
Clone NO.	11F9
React Species	(predicted: Human, Cow,) WB=1:500-1000
Applications	not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Theoretical molecular weight	14kDa
Cellular localization	Secretory protein
Form	Liquid
Concentration	1mg/ml
immunogen	purified human alpha Lactalbumin: full length
Lsotype	IgG1
Purification	affinity purified by Protein G
Buffer Solution	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.
Storage	Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
Attention	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
PubMed	PubMed
Product Detail	Alpha-lactalbumin is the B protein of lactose synthetase secreted by the mammary epithelial cells. It is a potent Ca ²⁺ -elevating and apoptosis-inducing agent with broad, yet selective, cytotoxic activity.

Multimeric α -lactalbumin has been shown to kill all transformed, embryonic and lymphoid cells tested, but not mature epithelial elements. This suggests that milk contributes to mucosal immunity not only by furnishing antimicrobial molecules but also by policing the function of lymphocytes and epithelium. α -lactalbumin may be helpful in discovering the site of origin of metastatic breast tumors. Human lactalbumin contains 123 amino acid residues. Comparison of the 5' flanking sequences of the two Alpha-lactalbumin genes with those of five casein genes reveals the presence of a highly conserved region extending from position -140 to -110 in all seven sequences examined, suggesting a possible regulatory role in the hormonal control or tissue-specific expression of milk protein genes in the mammary gland.

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.

Subunit:

Lactose synthase (LS) is a heterodimer of a catalytic component, beta1,4-galactosyltransferase (beta4Gal-T1) and a regulatory component, alpha-lactalbumin (LA).

Subcellular Location:

Secreted.

Tissue Specificity:

Mammary gland specific. Secreted in milk.

Similarity:

Belongs to the glycosyl hydrolase 22 family.

SWISS:

P00709

Gene ID:

3906

Database links:



[Entrez Gene: 3906](#) Human

[Omim: 149750](#) Human

[SwissProt: P00709](#) Human

[Unigene: 72938](#) Human