



Rabbit Anti-Beta-casein antibody

SL10032R

Product Name:	Beta-casein
Chinese Name:	β-酪蛋白抗体
Alias:	Beta-casein; Casoparan; Antioxidant peptide; Casohypotensin; CASB; CASB_BOVIN; Casein beta; CSN 2; Csn2; CASB BOVIN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Cow,Sheep,
Applications:	ELISA=1:500-1000 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	24kDa
Cellular localization:	Secretory protein
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from cow Beta-casein:16-100/224
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	Milk proteins are crucial for the development of all newborn mammals and caseins constitute the major proteins in mammalian milk. b- and k-caseins are the only caseins present in human milk. The b-casein/k-casein ratio is higher in colostrum than in transitional and mature milk and is related to a better digestibility of colostrum casein micelles by the neonate during the first days of life. Human b-casein-encoding gene (Bca) contains a highly phosphorylated site, which is responsible for the calcium-binding capacity of b-casein. A common set of transcription factors are required for the

expression of b-casein. Multiple binding sites for Stat5, C/EBP β (CCAAT/enhancer-binding protein) and several half-sites for glucocorticoid receptor (GR) are identified in the distal human enhancer of the b-casein gene. b-casein gene transcription is regulated primarily by a composite response element (CoRE), which integrates signaling from the lactogenic hormones PRL, insulin and hydrocortisone in mammary epithelial cells. NF κ B functions as a negative regulator of b-casein gene expression during pregnancy by interfering with Stat5 tyrosine phosphorylation

Function:

Important role in determination of the surface properties of the casein micelles. Casoparan acts as a macrophage activator, increasing the phagocytic activity of macrophages and peroxide release from macrophages. It also acts as a bradykinin-potentiating peptide. Casohypotensin acts as a bradykinin-potentiating peptide. Induces hypotension in rats. Acts as a strong competitive inhibitor of endo-oligopeptidase A. Antioxidant peptide has antioxidant activity.

Subcellular Location:

Secreted.

Tissue Specificity:

Mammary gland specific. Secreted in milk.

Similarity:

Belongs to the beta-casein family.

SWISS:

P02666

Gene ID:

281099

Database links:

[Entrez Gene: 1447](#)Human

[Entrez Gene: 281099](#) Bovin

[Entrez Gene: 443391](#) Sheep

[Omim: 115460](#)Human

[SwissProt: P05814](#)Human

[SwissProt: P02666](#)Bovin

[Unigene: 2242](#)Human

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

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