

# Rabbit Anti-Beta casein antibody

# SL0466R

Product Name:	Beta casein
Chinese Name:	β-酪蛋白抗体
Alias:	Beta-casein; CASB; CASB_SHEEP; Casein beta; CSN 2; Csn2.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Sheep, Goat,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair)
	not yet tested in other applications.  optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	23kDa
Cellular localization:	Secretory protein
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from sheep Beta-casein:151-222/222
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:	<u>PubMed</u>
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 calciumbinding capacity of b-casein. A common set of transcription factors are required for the

expression of b-casein. Multiple binding sites for Stat5, C/EBPb (CCAAT/enchancer-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. NFkB 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.

# **Subcellular Location:**

Secreted.

# **Tissue Specificity:**

Mammary gland specific. Secreted in milk.

# Similarity:

Belongs to the beta-casein family.

#### **SWISS:**

P11839

#### Gene ID:

443391

#### Database links:

Entrez Gene: 443391 Sheep

Entrez Gene: 1447Human

Omim: 115460Human

SwissProt: P05814Human

Unigene: 2242Human

# **Important Note:**

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

# β-酪蛋白常在乳腺表达, 山羊、绵羊同源

分子量:25kDa