
Beta-casein Rabbit pAb

Catalog Number: bs-10032R

Target Protein: Beta-casein

Concentration: 1mg/ml

Form: Liquid

Host: Rabbit

Clonality: Polyclonal

Isotype: IgG

Applications: WB (1:500-2000)

Reactivity: Human, Cow, Goat (predicted:Sheep)

Predicted MW: 24 kDa

Source: KLH conjugated synthetic peptide derived from cow Beta-casein: 16-100/224.

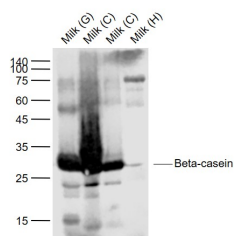
Purification: affinity purified by Protein A

Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

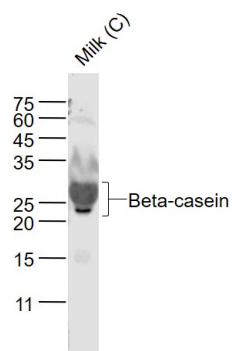
Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

Background: 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/EBPb (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. NFkB functions as a negative regulator of b-casein gene expression during pregnancy by interfering with Stat5 tyrosine phosphorylation

VALIDATION IMAGES



Sample: Lane 1: Milk (Goat) Lysate at 2 ug Lane 2: Milk (Cow) Lysate at 30 ug Lane 3: Milk (Cow) Lysate at 3 ug Lane 4: Milk (Human) Lysate at 30 ug Primary: Anti-Beta-casein (bs-10032R) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 25-29 kD Observed band size: 25-29 kD



Sample: Lane 1: Milk (Cow) Lysate at 40 ug Primary: Anti-Beta-casein (bs-10032R) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 24 kD Observed band size: 24 kD

PRODUCT SPECIFIC PUBLICATIONS

[IF=11.504] Sanam Foroutanparsa. et al. Spatial distribution of α s1-caseins and β -caseins in milk gels acidified with glucono- δ -lactone. FOOD HYDROCOLLOID. 2023 Jan;;108506 IF ; COW . 10.1016/j.foodhyd.2023.108506

[IF=10.7] Mariska Bröls. et al. Investigating the impact of exopolysaccharides on yogurt network mechanics and syneresis through quantitative microstructural analysis. FOOD HYDROCOLLOID. 2023 Dec;;109629 Other ; . 10.1016/j.foodhyd.2023.109629

[IF=5.7] Jinlong Zhang. et al. Selenomethionine Promotes Milk Protein and Fat Synthesis and Proliferation of Mammary Epithelial Cells through the GPR37-mTOR-S6K1 Signaling. J AGR FOOD CHEM. 2024;XXXX(XXX):XXX-XXX WB ; Mouse . 39177123

[IF=4.125] Minghui Zhang. et al. Comparative Transcriptomic Analysis of Mammary Gland Tissues Reveals the Critical Role of GPR110 in Palmitic Acid-Stimulated Milk Protein and Fat Synthesis. BRIT J NUTR. 2023 Mar;;1-32 WB ; Mouse . 36946032

[IF=4.192] Chaochao Luo. et al. Glutamine Regulates Cell Growth and Casein Synthesis through the CYTHs/ARFGAP1-Arf1-mTORC1 Pathway in Bovine Mammary Epithelial Cells. J Agr Food Chem. 2021;XXXX(XXX):XXX-XXX WB ; Bovine . 34096300