

β -casein (m2): 293T Lysate: sc-119008

BACKGROUND

Milk proteins are crucial for the development of all newborn mammals and caseins constitute the major proteins in mammalian milk. β - and κ -caseins are the only caseins present in human milk. The β -casein/ κ -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 β -casein-encoding gene (Bca) contains a highly phosphorylated site, which is responsible for the calcium-binding capacity of β -casein. A common set of transcription factors are required for the expression of β -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 β -casein gene. β -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 β -casein gene expression during pregnancy by interfering with Stat5 tyrosine phosphorylation.

REFERENCES

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STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

CHROMOSOMAL LOCATION

Genetic locus: Csn2 (mouse) mapping to 5 E1.

PRODUCT

β -casein (m2): 293T Lysate represents a lysate of mouse β -casein transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

APPLICATIONS

β -casein (m2): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive β -casein antibodies. Recommended use: 10-20 μ l per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.