



Chicken antibody to bovine A2 beta casein protein: Affinity purified

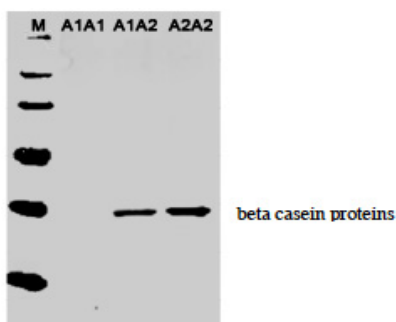
Catalogue No.:	C-1780-100
Description:	Bovine milk contains two types of beta-casein protein, A2 or A1. Recent studies have shown that milk containing the A1 beta casein protein can contribute to issues including gastrointestinal discomfort after ingestion. There is some evidence of a link between ingestion of A1 beta casein protein and the development of Type 1 diabetes.
Related products:	C-1781-100: Chicken antibody to bovine A1 beta casein: Affinity purified. R-1794-100: Rabbit antibody to bovine beta casein: Affinity purified.
Batch No.:	Please refer to the product label.
Unit size:	100 uL (Refer to label for antibody concentration)
Antigen:	A synthetic peptide (PGPIPNSLP, aa: 78-86) conjugated to KLH has been used as immunogen. Bovine A1 beta casein differs from bovine A2 beta casein by one amino acid (H82 -> P82)
Sequence:	PGPIPNSLP
Antibody Type:	Chicken polyclonal
Accession:	P02666 (CASB_BOVIN)
Produced in:	Chicken
Purity:	Affinity purified chicken IgY.
Applications:	Western blot and ELISA. Suggested working dilution for western blot is 1:200-1:1,000. The amount of milk per lane can be 0.05ul-0.1ul for Western blot. Sample Preparation: Milk should be diluted 1:10 in 0.1M NaOH. The reason for diluting (1:10) in 0.1M NaOH is because the milk protein is easier to dissolve in NaOH. The sample is then further diluted with PBS or other buffer and mixed at 1:1 ratio, to prepare for loading. For example, one can take the 1:10 dilution milk (0.5ul-1ul) and add into 9.5ul or 9ul PBS and mix with 10ul SDS-PAGE Sample buffer, boil for 5 minutes, quick spin, and load on the gel. Recommended blocking buffer: TBS with 5% BSA. Recommended antibody dilution buffer: TBST containing 3% BSA. Biosensis recommends that optimal working dilutions should be determined by the end user.
Specificity:	The antibody is specific to A2 beta casein by western blot and ELISA. No cross-reactivity with A1 beta casein is seen.
Species Against:	Bovine
Cross-reactivity:	Species cross-reactivity not tested.
Form:	Liquid in PBS, pH 7.4, containing 0.02% sodium azide as preservative. Refer to the product label for antibody concentration.
Storage:	Maintain unopened vial at -20C for up to 12 months after date of receipt. After opening maintain at -20C in undiluted aliquots for up to 6 months. For short-term storage, keep aliquot at 2-8C for up to one week. Avoid repeated freeze-thaw cycles.
Expiry Date:	12 months after date of receipt unopened and stored at -20C.

FOR RESEARCH USE ONLY



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General References: Nutr Diabetes. 2017 May 15;7(5):e274
Nutr J. 2016 Apr 2;15:35



Western Blot analysis of cow milk with chicken anti-A2 casein antibody (1 µg/mL). Blot was developed with donkey anti-chicken secondary antibody used at 1/4000 dilution. C-1780-100 is specific for A2 protein and does not recognize A1 protein on western blots.

Lane M: Molecular weight marker

Lane A1A1: 50 nL milk from the cow bearing A1/A1 alleles

Lane A1A2: 50 nL milk from the cow bearing A1/A2 alleles

Lane A2A2: 50 nL milk from the cow bearing A2/A2 alleles

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