



A set of reagents for the determination of β-casein A1 in a cow's milk

MULTISCREEN® β-CASEIN A1 ELISA



Technical support: support@komprod.com

MULTISCREEN ® - manufacturer's trademark

ОДО KomProdService

220114, Minsk, Filimonova str., 25G Tel.: +375 17 336 50 54 (BY) +7 499 704 05 50 (RU)

E-mail: info@komprod.com Site: www.komprod.com



Manufactured in cooperation with the Institute of Bioorganic Chemistry of the National Academy of Sciences of Belarus





MULTISCREEN® β-CASEIN A1 ELISA

General

A set of reagents for determining the concentration of β -casein A1 in whole cow's milk, skim milk and powdered reconstituted cow's milk in order to control the quality of milk containing β -casein A2.



Kit contents

Microplate immuno-sorbent coated with antibodies to total β-casein	1 plate (6 strips with 8 removable wells each)
Dilution buffer	50 ml
Calibration tests	5 pcs
Control samples	2 pcs
Antibodies specific to β-casein A1, 100-fold concentrate	60 µl
Conjugate dilution solution	7 ml
Conjugate (anti-species anti- body, labeled with peroxidase), 100x concentrate	60 µl
Flushing solution, 10x concentrate	50 ml
Chromogen-substrate solution	3,5 ml
Stop-reagent	7 ml

Standard range (ready-to-use):

Concentration of β-casein A1:

6,3; 12,5; 25,0, 50,0 и 100,0 ng/ml

Antibody cross-reactivity:

The analysis does not cross-react with bovine β-casein A2

Storage:



Temperature range: 2-8°C



Detection limit (LOD) and range:

For raw, pasteurized, sterilized milk, reconstituted powdered milk

LOD:	0,32 mg/ml
Detection range:	0,32 - 5,00 mg/ml

*when analyzing milk samples obtained by mixing A2 milk from different animals, for example, when milking into a common tank, an increase in the optical density of the mixed sample is possible, which is not associated with contamination of the samples with A1 milk. In this regard, the sensitivity of the technique for a mixed sample will be approximately 1.5 mg/ml.

Sample preparation:

The analyzed milk sample must be diluted with buffer 1: 50,000 in two steps.

Procedure:

Standards, conjugate and samples are pipetted into the wells which are pre-coated with the specific antibody to β -casein. This is incubated for 60 minutes at $20^{\circ}\text{C} - 25^{\circ}\text{C}$. After a washing procedure ready-to-use substrate is added and incubated for 60 minutes at $20^{\circ}\text{C} - 25^{\circ}\text{C}$. The reaction is stopped and the absorbance is read in a spectrophotometer at 450 nm.

To calculate and interpret the result, use the template attached to the set in *Microsoft Excel* format.