

University of Ljubljana
Biotechnical Faculty
Department of Animal Science



INŠITITUT ZA MLEKARSTVO IN PROBIOTIKE
INSTITUTE OF DAIRY SCIENCE & PROBIOTICS

CATALOGUE OF SERVICES

Reference materials

2026

RAW MILK

(preserved with Bronopol® 0.02 %, excluding SET 3A)

SET 1:

Parameter:

Control or calibration of MID-IR instruments

Fat (g/100 g); approximate range 2,5 – 5,5 g/100 g**Proteins (g/100 g);** approximate range 2,5 – 4,2 g/100 g**Lactose anhidrid (g/100 g);** approximate range 4,0 – 5,5 g/100 g**Total solids (g/100g);** approximate range 10,0 – 15,0 g/100 g

Standard values determined by method:

Fat: Gravimetric, Röse Gottlieb (ISO 23318/ IDF 249)**Proteins:** Kjeldahl (ISO 8968-3/IDF 20-3)**Lactose:** Liquid chromatography (ISO 22662/IDF 198)**Total solids:** Gravimetric, drying at 102°C (ISO 6731/IDF 21)

Number of samples:

10

Sample volume:

60 ml

With registration / month:	
Price for SET 1:	125,00 €
Price for extra SET 1:	90,00 €

SET 2:

Parameter:

Control or calibration of different instruments

Urea (mg/100 ml); approximate range 10 - 60 mg/100 ml

Standard values determined by method: Differential pH-metry (ISO 14637/IDF 195)

Number of samples:

7

Sample volume:

60 ml

With registration / month:	
Price for SET 2:	105,00 €
Price for extra SET 2:	75,00 €

SET 3A:

Parameter:

Calibration/control of different instruments

Freezing point (°C) - NON-PRESERVED SAMPLES

approximate range -0,480 do -0,550 °C

Standard values determined by method: Cryoscopy (ISO 5764/IDF 108)

Number of samples:

10

Sample volume:

60 ml

With registration / month:	
Price for SET 3A:	90,00 €
Price for extra SET 3A:	60,00 €

SET 3B:

Parameter:

Control of different instruments

Freezing point (°C) – PRESERVED SAMPLES

approximate range -0,480 do -0,550 °C

Standard values determined by method: Cryoscopy (ISO 5764/IDF 108)

Number of samples:

10

Sample volume:

60 ml

With registration / month:	
Price for SET 3B:	90,00 €
Price for extra SET 3B:	60,00 €

RAW MILK

(preserved with Bronopol® 0.02 %)

SET 4:

Parameter:

Enumeration of somatic cells by fluoro-opto-electronic counters

Somatic cells/ml; approximate range 1000.000 – 1.500.000 SC/ml

Standard values determined by method: fluoro-opto-electronic method (ISO 13366-2/IDF 148-2)

Number of samples:

5

Sample volume:

60 ml

With registration / month:	
Price for SET 4:	105,00 €
Price for extra SET 4:	70,00 €

PASTEURISED MILK

(preserved with Bronopol® 0.02 %)

SET 5:

Parameter:

Control or calibration of IR instruments

Fat (g/100 g); approximate range 0,5 – 3,9 g/100 g**Protein (g/100 g);** approximate range 3,4 – 3,7 g/100 g**Lactose anhidrid (g/100 g);** approximate range 4,6 – 4,8 g/100 g**Total solids (g/100 g);** approximate range 10,0 – 13,0 g/100 g

Standard values determined by method: IR spectrometry (ISO 9622/IDF 141)

Number of samples:

10

Sample volume:

60 ml

With registration / month:	
Price for SET 5:	130,00 €
Price for extra SET 5:	90,00 €

PASTEURISED CREAM

(preserved with Bronopol® 0.02 %)

SET 6:

Parameter:

Control or calibration of IR instruments

Fat (g/100 g); approximate range 20,0 – 40,0 g/100 g**Proteins (g/100 g);** approximate range 2,0 – 3,0 g/100 g**Total solids (g/100 g);** approximate range 30,0 – 45,0 g/100 g

Standard values determined by method:

Fat: Gravimetry, Röse Gottlieb (ISO 23318/ IDF 249)**Proteins:** Kjeldahl (ISO 8968-3/IDF 20-3)**Total solids:** Gravimetry, drying at 102°C (ISO 6731/IDF 21)

Number of samples:

3

Sample volume:

60 ml

With registration / month:	
Price for SET 6:	75,00 €

SENSORY ANALYSIS**SET 7:**

Parameter:

recognition of basic tastes

basic tastes (salty, bitter, sweet, sour)

Number of samples:

5

Sample volume:

samples for preparation testing solutions, prepared solutions are sufficient to carry out the analysis of 5 assessors (according to ISO 22935-1/ IDF 99-1)

With registration:	
Price for SET 7:	120,00 €
Price for extra SET 7:	90,00 €

Dispatch dates of RM 2026

SET	jan	feb	mar	apr	may	jun	jul	aug	sep	oct	nov	dec
1												
2												
3A												
3B	6.	3.	3.	31.3.	5.	2.	7.	4.	1.	6.	3.	1.
4												
5												
7												
6		3.						4.				

Number of extra SETs is not limited.

VAT is not included in the prices.

Samples “***Without annual registration***” order at least **one week before the date of the dispatch**.

Reference values of RM samples will be published on the website <http://www.bf.uni-lj.si/en/iml-pro/>.

Costs of transport and documentation (Veterinary certificate for export, invoices, etc.) are not included in the prices.

Samples can be ordered also **between dispatch dates (calibration, control, service of instruments, etc.)** but at least **one week in advance** (prices by agreement).

Please send us completed **registration form** (Page 4) to

E-mail: borut.kolenc@bf.uni-lj.si

before 30th December 2025

Preparation of catalogue: Borut Kolenc

Head of laboratory: dr. Petra Mohar Lorbeg

ANNUAL REGISTRATION FORM**REFERENCE MATERIALS****2026****Name and DELIVERY/INVOICING address:** _____**Contact person:** _____

Phone: _____ E-mail: _____

INDICATE THE NUMBER OF SETs/month												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
SET 1 – MID-IR spectroscopy fat, protein, lactose												
extra SET 1												
SET 2 – urea												
extra SET 2												
SET 3A – freezing point (NON-PRESERVED SAMPLES)												
extra SET 3A												
SET 3B – freezing point (PRESERVED SAMPLES)												
extra SET 3B												
SET 4 – enumeration of somatic cells												
extra SET 4												
SET 5 – pasteurised milk												
extra SET 5												
SET 6 – pasteurised cream												
extra SET 6												
SET 7 – sensory analysis												
extra SET 7												
Please declare Shipping/delivery method <input type="checkbox"/> By post <input type="checkbox"/> Personal take-over <input type="checkbox"/> Other (by agreement)												

Date:

Signature: