



INŠTITUT 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 <u>THE NUMBER</u> 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: _____