

Fast Phosphatase

Rapid Detection of Proper Milk Pasteurization

5th Revision 20.02.2024

MenidiMedica
Biotechnology Applications

REF 82001 - 100 tests  24 months, storage at 2-8°C

Description

The Fast Phosphatase test from the Greek company MenidiMedica Biotech is an easy-to-use, rapid, and highly sensitive test for monitoring proper milk pasteurization. Qualitative determination based on a color code or quantitative on the semi-automatic analyzer Electra m2. The method is the most sensitive, yielding results in 1 minute.

Package contents: 1 x 10 mL. Reagent Vial R, 1 x Sample Pipette, 10 eppendorf vials

Number of tests 100 tests

Ref. : 82001

Shelf life: 24 months from date of manufacture

Storage & Stability: 2-8°C

Method Sensitivity (LOD) - Limit of Detection (single reagent version)

At room temperature (20-25°C): 17.5 mU/L.

Certified by Democritus University of Thrace

Sample Collection Instructions

No sample pre-incubation or preparation is required.

Samples

Cow, goat, sheep, buffalo milk, ice cream, butter, cheese, liquid cheese

Required Equipment

100 uL pipette, pipette tips

Qualitative Determination - Methodology

1. Pipette 2 drops of reagent R into a single vial (if you want to reuse the vial, wash thoroughly with distilled water)
2. Pipette 2 drops of milk sample with sample pipette for testing into the single vial
3. Close the single vial and gently shake for 1-2 seconds
4. Read the color result after 1 minute

Interpretation of Results

White color: Positive-Successful pasteurization process

Yellow/Green: Negative-Unsuccessful pasteurization process, repeat pasteurization or check for contamination

Safety Measures

The substances of Fast Phosphatase pose no health risks when used according to common laboratory practices and procedures in this insert. For further safety instructions, refer to the Safety Data Sheet (SDS).

References

1. European Food Safety Authority (EFSA); Clawin-Rädecker, I.; De Block, J.; Egger, L.; Willis, C.; Da Silva Felicio, M.T.; Messens, W. The use of alkaline phosphatase and possible alternative testing to verify pasteurisation of raw milk, colostrum, dairy and colostrum-based products. EFSA J. 2021, 19, e06576
2. Klotz, V.; Hill, A.; Warriner, K.; Griffiths, M.; Odumeru, J. Assessment of the colorimetric and fluorometric assays for alkaline phosphatase activity in cow's, goat's, and sheep's milk. J. Food Prot. 2008, 71, 1884-1888
3. Marchand, S.; Merchiers, M.; Messens, W.; Coudijzer, K.; De Block, J. Thermal inactivation kinetics of alkaline phosphatase in equine milk. Int. Dairy J. 2009, 19, 763-767.
4. Williams, D.J.; Nottingham, S.M. Suitability of a modification to the Aschaffenburg and Mullen alkaline phosphatase test for goats' milk: Collaborative study. Aust. J. Dairy Technol. 1990, 45, 21-23



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