

TÜBİTAK ULUSAL METROLOJİ ENSTİTÜSÜ

Reference Material Data Sheet

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Name of the Material : 100 % Beef (Lyophilized)

Reference Material Code : UME RM 1001

Issue Date : 08.03.2019

Last Revision Date : 08.03.2019 (Revision history can be found on the last page)

Validity Period : 6 months from the sales date.

Assigned Value

Parameter Assigned Value^[1] (%, w/w)

Beef Fraction 100.0

[1] Material is prepared from beef obtained from single animal. Verification of material identity, homogeneity and stability controls were carried out by PCR method.

Sales Date

Dr. Mustafa ÇETİNTAŞ Director Page 2/3

TÜBİTAK NATIONAL METROLOGY INSTITUTE

UME RM 1001

Description

Beef obtained from a single animal was separated from fat, chopped, lyophilized, ground, sieved and packed in an amber vial as 0.5 g. A 0.5-g of lyophilized sample is equivalent to approximately 2 g of wet beef sample.

The homogeneity and stability tests of the prepared material were carried out by the Polymerase Chain Reaction (PCR) technique.

In addition, this material was used in the "Determination of Meat Species" proficiency test study with the code KAR-G3RM-650.2018.01. Laboratories used ELISA or PCR method in this study. According to the results of this study, pork, single-toed, mutton or poultry meats were not detected in the material.

Intended Use

The material is suitable for use in quality control studies of meat and meat-containing products for beef identification.

Instructions for Use

The content of the vial must be mixed before use. The minimum sample intake amount is 50 mg. It is recommended to homogenize the sample by diluting it with water in the ratio of 1:3 (w / v) to represent the natural meat sample, and to take necessary precautions against the risk of contamination by keeping the vial cap closed as soon as possible after each use.

Storage Conditions

The material should be stored at (5 ± 3) °C in a dry and dark place. It is recommended that the reconstituted sample should be stored at (5 ± 3) °C and used within a week. The material in an unopened vial can be safely dispatched at ambient temperature without applying additional cooling where the temperature does not exceed 60 °C and the transportation period of one week.

TÜBİTAK UME cannot be held responsible for changes that might happen to the material at customer's premises due to noncompliance with the instructions for use, and the storage conditions described in the reference material data sheet.

Safety Information

Usual laboratory precautions apply. It is strongly recommended that the material must be handled and disposed according to the safety guidelines where applicable.

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Participants

Information about the laboratory participated in the sample preparation and measurement is presented in the following table.

Laboratory	Address
TÜBİTAK UME	TÜBİTAK Gebze Yerleşkesi, Barış Mah. Dr.Zeki Acar Cad. No.1 41470 Gebze / Kocaeli, Turkey

Techniques Used for Determination of the Assigned Values

Material was prepared from beef obtained from single animal. Verification of material identity, homogeneity and stability controls were carried out by PCR method.

Revision History

Date	Remarks
08.03.2019	First publication.