

CERTIFICATE OF ANALYSIS

ERM[®] - BF419a

DRIED SUGAR BEET POWDER		
	Mass Fraction	
	Certified value ¹⁾ [g/kg]	Uncertainty [g/kg]
H7-1 sugar beet	0	0
<p>1) No contamination was detected in the non-GM material when applying event-specific H7-1 real-time PCR and ELISA targeting the 5-enolpyruvylshikimate-3-phosphate synthase protein on each individual sugar beet root used for processing. The certified value is traceable to the SI.</p>		

This certificate is valid for 3 months after purchase.

Sales date:

The minimum amount of sample to be used is 100 mg.

NOTE

European Reference Material ERM[®]-BF419a was produced and certified under the responsibility of the IRMM according to the principles laid down in the technical guidelines of the European Reference Materials[®] co-operation agreement between BAM-IRMM-LGC. Information on these guidelines is available on the internet (<http://www.erm-crm.org>).

Accepted as an ERM[®], Geel, December 2006

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Signed: _____



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DESCRIPTION OF THE SAMPLE

ERM-BF419a is part of a set of two sugar beet powder CRMs containing different mass fractions of genetically modified (GM) H7-1 sugar beet. The set of CRMs (ERM-BF419a and ERM-BF419b) was produced and certified under the responsibility of the Institute for Reference Materials and Measurements of the European Commission's Directorate General Joint Research Centre (EC-DG JRC-IRMM). ERM-BF419a is available in glass bottles containing approximately 1 g of sugar beet powder closed under argon atmosphere. This reference material has been produced from non-modified sugar beet roots delivered by KWS (Einbeck, DE). According to Commission Regulation (EC) No 65/2004 the event H7-1 sugar beet corresponds to the unique identifier KM-ØØØH71-4.

ANALYTICAL METHOD USED FOR CERTIFICATION

The certified H7-1 mass fraction is based on the mass fraction of non-modified sugar beet roots used for the processing of the CRM. All sugar beet roots used in the processing were individually tested by ELISA and event-specific rt-PCR.

PARTICIPANT

EC-DG JRC-IRMM, Geel (BE)

SAFETY INFORMATION

This CRM is intended for laboratory use only and should not be used for drugs, household and other uses. As the powder material is not viable, accidental release into the environment forms no risk.

INSTRUCTIONS FOR USE

CRM ERM-BF419a is intended to be used for the quality control or calibration of methods for the quantification of the H7-1 sugar beet mass fraction in food and feed. The dried sugar beet powder proved to be slightly hygroscopic, users are therefore generally advised to close bottles fast after removal of some powder.

A fractionation method confirmed that the DNA mass fraction in the two CRM ERM-BF419a and ERM-BF419b are similar. Applying a commonly used CTAB extraction method a difference in the mass fractions of extracted genomic DNA was observed between ERM-BF419a and ERM-BF419b. Therefore, the user of these CRMs is strongly advised only to prepare mixtures of purified DNA, e.g. for calibration purposes, if the extraction method used leads to similar DNA mass fractions extracted from the non-GM and GM materials. Otherwise it can not be assumed that gravimetric mixtures of the two powders correspond to equivalent DNA fractions expressed in relative haploid genome copy numbers.

STORAGE

Bottles should be stored dry and in the dark at - 20 °C.

However, the European Commission cannot be held responsible for changes that happen during storage of the material at the customer's premises, especially of opened samples.

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NOTE

A detailed technical report is available on www.erm-crm.org. A paper copy can be obtained from IRMM on request.