

Certified Reference Material

Email: <u>CRM@aocs.org</u> Tel: +1-217-359-2344

Certificate of Analysis

AOCS 0117-E, LBFLFK Canola (1-gram vial) OECD unique identifier BPS-BFLFK-2

Certified Presence	Certified Value	Measurement Uncertainty	Test Method
LBFLFK canola present	1000 g/kg	-23 g/kg	event-specific real-time PCR

Description: This is the first batch of LBFLFK Canola CRM prepared by AOCS for BASF Plant Science, L.P. The certified value is based on a sample purity of 100% (349 out of 349 seeds tested positive for LBFLFK). With 95% confidence, the true value is ≥ 977 g/kg. The measurement uncertainty is the expanded uncertainty with a coverage factor of 2 and confidence level of 95%. This material is for limited purposes only: see "Intended Use" and "Terms and Conditions."

This certificate is valid through: July 2025

This validity may be extended when further evidence of stability becomes available. Customers will be notified by AOCS if a stability issue arises at AOCS Headquarters.

Introduced: 17 November 2021

Revised: 18 July 2022, 26 July 2023, 2 July 2024

Technical Services Manager Denise Williams

Chief Executive Officer Patrick J. Donnelly

AOCS Mission: AOCS advances the science and technology of oils, fats, proteins, surfactants and related materials, enriching the lives of people everywhere.

Characterization

Product Description AOCS 0117-E has been prepared from genetically modified (GM) homozygous LBFLFK canola seed provided by BASF Plant Science, L.P. The CRM is supplied in 6 mL headspace vials containing approximately 1g canola powder and sealed under a nitrogen atmosphere.

Homogeneity The homogeneity of AOCS 0117-E is related to the purity of the seeds. 349 out of 349 seeds tested positive for the LBFLFK canola event by event-specific PCR. Based on the sample purity of 100%, as determined using SeedCalc8, the batch was considered to be homogeneous.

Stability AOCS Certified Reference Materials are assessed for transport (short-term) and long-term stability and tested for stability on an annual basis and certificates may be extended based on the outcome of this testing. Customers may request extended certificates, but they are informed that results are based on samples that are obtained from AOCS' inventory. AOCS cannot guarantee the integrity of samples outside of our control.

Analytical Method Used for Certification

The Certified value is based on the purity of the LBFLFK canola material used in production of this CRM. Eurofins-Gene Scan, New Orleans, LA (an ISO 17025 Accredited laboratory) performed event-specific real-time PCR for LBFLFK to validate the presence of the LBFLFK trait. Purity, homogeneity and stability results were used to determine the expanded measurement uncertainty of the certified value.

Warnings and Precautions

This product is for laboratory use only and is not for consumption. The user of this CRM should follow safety requirements and rules issued by voluntary organizations and government agencies expert in the field of laboratory safety.

Intended Use

This CRM, AOCS 0117-E, is intended for use as quality control material or calibrant in methods for the detection, identification, and/or quantification of biotechnology-derived events.

Instructions for Use

Upon receipt the product should be stored in a sealed container in the dark and at ambient or cooler conditions.

If the user of this CRM intends to use it multiple times, proper protocols must be followed to ensure that the sample retains its integrity. Use a clean laboratory spatula to remove the intended sample amount. After the sample has been removed, flush the headspace of the vial with nitrogen gas, then replace the rubber stopper. Place a new 20 mm tear-off aluminum unlined seal on top of the rubber stopper and crimp it to the vial using a crimping tool. Store the CRM in the dark and at ambient or cooler conditions and repeat this process for all subsequent uses.

Sample size:

The recommended **sample intake** suitable for DNA extraction and real time PCR is 200 mg.

Protocols have been followed to ensure that this CRM has the presence of the LBFLFK trait. Please follow all instructions on this certificate to prevent contamination and be sure to store the CRM under the proper conditions.

Note: The certification report for AOCS series 0117-E is available online and a paper copy will be supplied upon request.

Terms and Conditions (i- ix)

- i. The CRM AOCS 0117-E shall be used solely 1) in assays for (a) detecting the presence of LBFLFK, or (b) quantification of LBFLFK; or 2) for determining whether an assay cross-reacts with CRM AOCS 0117-E. CRM AOCS 0117-E shall be used for no other purpose. Specifically, the CRM may not be used to develop a detection method for LBFLFK nor trait(s) present therein. No other rights are conveyed by the sale of the CRM 0117-E to any purchaser, including any rights to any pending or granted BASF Plant Science LP Patents or other BASF Plant Science, L.P. Intellectual Property that may protect the CRM or LBFLFK or trait(s) present therein or a detection method for LBFLFK.
- ii. Neither the CRM AOCS 0117-E nor any extract or portion thereof shall be resold or redistributed by any purchaser, unless the resale or redistribution is required by national law in force in the purchaser's country.
- iii. Neither the CRM AOCS 0117-E, nor any extract or portion thereof, shall be used for human or animal consumption or human or animal trials.
- iv. Neither the CRM AOCS 0117-E nor LBFLFK DNA, nor any part of either of these, shall be used for transformation or breeding.

- v. No characterization or derivation of LBFLFK, of the trait or traits present in CRM AOCS 0117-E, or of the CRM AOCS 0117-E shall be performed, except as allowed for in section (i).
- vi. All assay activities undertaken using the CRM AOCS 0117-E shall be conducted in strict compliance with all Applicable Laws governing such activities and shall comply with conditions of all permits and authorizations which may be required for such activities; and such activities shall be strictly limited to assays in contained facilities, for example, laboratories.
- vii. Prior to disposal of any used or excess CRM AOCS 0117-E or residues thereof, such material or residue must be treated in a manner that degrades LBFLFK in the CRM material, such as by autoclaving.
- viii. CRM AOCS 0117-E shall not be exported nor re-exported in violation of any Applicable Laws or without securing any necessary export or import clearances or permits.
- ix. THE CRM 0117-E IS PROVIDED FOR THE PURPOSE OF IDENTIFYING, DETECTING AND QUANTIFYING LBFLFK AND FOR NO OTHER PURPOSE. AOCS HAS TESTED CRM 0117-E WITHIN THE PAST 12 MONTHS AND STATES THAT IT HAS DETERMINED IT TO BE OF SUFFICIENT QUALITY AND FIT FOR THE PURPOSES STATED HEREIN. NO BASF PLANT SCIENCE, L.P. WARRANTY IS PROVIDED WHETHER EXPRESS OR IMPLIED, IN RELATION TO THE CRM AOCS 0117-E AND BASF PLANT SCIENCE, L.P. MATERIALS. BASF PLANT SCIENCE, L.P. MAKES NO REPRESENTATION OR WARRANTY THAT THE USE OF THE CRM AOCS 0117-E, WHETHER BEFORE, OR AFTER THE EFFECTIVE DATE OF THE APPLICABLE CERTIFICATE, WILL NOT INFRINGE ANY PATENT OR OTHER PROPERTY RIGHTS.