

PRODUCT INFORMATION SHEET
Cry1Ab/Ac, p35S, PAT, t-NOS / Maize +
GMO-Maize (Bt11, MIR604 and MON87429)
in Maize Flour (positive)
PT originated REFERENCE MATERIAL (RM)

Description of the RM

Name / Material of related PT	<i>DLA ptGMO1 (2025) – GMO-Determination in Maize Flour (qualitative + quantitative) Cry1Ab/Ac, p35S, PAT, t-NOS / Maize + GMO-Maize (Bt11, MIR604 and MON87429) – Sample A (positive sample)</i>
Identifier / LOT	<i>RM 2025-GMO1 A</i>
Expiry date	<i>November 2026</i>
Matrix	<i>Maize Flour</i>
Physical description	<i>Powder</i>
Packaging / weight	<i>Sealed foil pouche / 10 g</i>
Storage conditions	<i>2 - 10°C (dry and dark)</i>
Name and address manufacturer	DLA - Proficiency Tests GmbH Hauptstr. 80, 23845 Oering, Germany Tel. ++49-(0)4532-9183358, Fax. ++49(0)4102-9944976 eMail. pt@dla-lvu.de , website. www.dla-lvu.de

Composition of Material

Ingredients	Sample A present sample	Sample B	GMO- Content
Maize flour, European Supplier Ingredients: Maize flour	38,9 g/100 g	100 g/100 g	–
Maize flour, American Supplier Ingredients: Maize flour	57,6 g/100 g	–	positive (GMO-Maize experimental)
GMO Maize MIR604 Reference material: 100% GMO-Maize	3,07 g/100 g	–	positive (MIR604 added)
GMO Maize MON87429 Reference material: 100% GMO-Maize	0,45 g/100 g	–	positive (MON87429 added)

Note: The metrological traceability of temperature, mass and volume during production of the PT samples is ensured by DAKKS-compliant calibrated reference materials.

Minimum Sample Size / Homogeneity

A minimum sample size of 5 g is recommended for sample preparation.

The homogeneity tests were performed with sample sizes of 5 g (Microtracer analysis).

The mixture homogeneity was examined 10-fold by microtracer analysis. Homogeneity was sufficient with a probability of $\geq 25\%$ (excellent mixture) and a HorRat value in the range of acceptance (0,3 to 1,3).

Reference Values

All reference values were derived from the related PT round (for more details see final report).

Reference Values quantitative: GMO Events

Parameter	GMO-Maize <i>Bt11</i>		GMO-Maize <i>MIR604</i> (Info)		GMO-Maize <i>MON87429</i> (Info)	
	[log-data]	[%-data]	[log-data]	[%-data]	[log-data]	[%-data]
Number of results	6	6	4	4	3	3
Number of outliers	0	0	0	0	0	0
Assigned Value (<i>X_{pt}</i>)	0,331	2,14	0,791	6,18	-0,230	0,589
Robust standard deviation	0,168	-	0,244		0,329	-
Standard uncertainty	0,086	-	0,152		0,238	-
Target standard deviation σ_{pt}	0,15	-	0,15		0,15	-
Target range	-	1,07 – 4,29	-	3,09 – 12,4	-	0,294 – 1,18

(Info): for information only

Reference Values qualitative: GMO Events

Parameter	Maize specific DNA	GMO-Maize <i>Bt11</i>	GMO-Maize <i>MIR604</i>	GMO-Maize <i>MON87429</i>
Number positive	9	9	6	3
Number negative	0	1	2	1
Percent positive	100	90	75	75
Percent negative	0	10	25	25
Consensus value	positive	positive	positive	positive

Reference Values qualitative: GMO Screening-Sequences

Parameter	<i>Cry1Ab/Ac</i>	<i>p35S</i>	<i>PAT</i>	<i>t-NOS</i>
Number positive	7	11	9	12
Number negative	1	1	1	1
Percent positive	88	92	90	92
Percent negative	13	8	10	8
Consensus value	positive	positive	positive	positive

Intended Use

- for laboratory use only, no food!
- validation of analytical methods
- control sample for quality control charts
- test material for inter-laboratory comparisons
- no medical use

Storage Instructions and Handling Information

The material should be stored as stated on page 1. Before use of the material should be warmed up to room temperature. The content should be mixed thoroughly prior to subsampling (see minimum sample size above). The material should be weighed immediately after opening of the foil poche/bottle and closed again afterwards in order to avoid uptake of moisture. Frequent freezing and thawing should be avoided as this can lead to changes in the properties of the material. The expiry date of this RM is based on the current knowledge and applies only for proper storage conditions in the originally closed foil poche/bottle.

Safety Precautions

The usual laboratory safety precautions should be applied when working with the RM considering the type of ingredients, parameters and its concentration.

Data Source

The material was analyzed by 12 laboratories within the related proficiency test (PT). Different analytical methods have been used.

Various

The user must determine the suitability of this RM for its particular purpose. DLA makes no warranty of any kind, expressed or implied, other than its products meet all quality control standards set by DLA. We do not guarantee this product can be used for a special application.



created	approved (PT-Coordinator)	updated
Ulrike Vorreiter	Matthias Besler-Scharf, PhD	-
<i>signed U. Vorreiter</i>	<i>signed M. Besler-Scharf</i>	-
16 December 2025	6 February 2026	-