

PRODUCT INFORMATION SHEET

Celery, Mustard, Pine Nut and Sesame in Spiking Level Sample (SP)

PT originated REFERENCE MATERIAL (RM)

Description of the RM

Name / Material of related PT	<i>DLA ptAL04 (2026) – Allergens IV: Celery, Mustard, Pine Nut and Sesame in Boiled Sausage [Samples A + B] and "Spiking Level Sample" [SP] (3 different Samples) – Sample SP (Spiking Level Sample)</i>
Identifier / LOT	<i>RM 2026-AL04 SP</i>
Expiry date	<i>July 2027</i>
Matrix	<i>Potato Powder</i>
Physical description	<i>Powder</i>
Packaging / weight	<i>Sealed foil poche / 15 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	Sample B	Sample SP present sample
Boiled Sausage (cooked), organic Ingredients: Minced meat (beef and pork) 70%, water 26%, pork gelatine 3,5%, salt 0,26%, citric acid, sorbic acid and positive sample: allergenic ingredients as below	100 g/100 g	98,7 g/100 g	-
Potato Powder Ingredients: Potatoes, E471, E304, E223, E100	-	-	99,8 g/100 g
Celery, Seeds, ground, mixture of 8 products (Europe, Asia) – as celery* – thereof 19,4% total protein**	-	98,8 mg/kg 19,2 mg/kg	41,9 mg/kg 8,14 mg/kg
Mustard, yellow (<i>Sinapis alba</i>), Seeds, ground, mixture of 9 products (Europe, Asia) – as mustard* – thereof 30,7% total protein**	-	192 mg/kg 59,1 mg/kg	26,1 mg/kg 9,00 mg/kg
Pine Nut, roasted, milled, mixture of 6 products (Pakistan, Russia, Italy, Spain, unknown) – as pine nut* – thereof 25,1% total protein**	-	190 mg/kg 47,8 mg/kg	27,2 mg/kg 6,83 mg/kg
Sesame, black (<i>Sesamum indicum</i>), Seeds, ground, mixture of 6 products (Asia, unknown) – as sesame* – thereof 21,1% total protein**	-	190 mg/kg 40,0 mg/kg	25,4 mg/kg 5,36 mg/kg
<i>further Ingredients:</i> <i>Maltodextrin, sodium sulfate and silicon dioxide</i>	<0,3 g/100 g	-	<0,3 g/100 g

* Allergen contents as "total food" as described in the column ingredients according to the gravimetric mixture

** Protein contents according to laboratory analysis of the raw material (total nitrogen according to Kjeldahl with F=6,25 for celery, mustard, pine nut and sesame protein)

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 after bottling 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 ISO 17043 accredited PT round (for more details see final report).

Reference Values quantitative in mg/kg ELISA

Parameter	Mustard	
	All Results*	Method RS-E**
Number of results	13	7
Number of outliers	0	0
Assigned Value (X_{pt})	36,8	37,4
Robust standard deviation	11,5	13,7
Standard uncertainty	3,97	6,45
Target standard deviation opt	9,21	9,36
Target range	18,4 – 55,2	18,7 – 56,1

* ELISA Method: diverse Methods

** ELISA Method: RS-E = Ridascreen® Easy, R-Biopharm

Parameter	Sesame	
	All Other Results*	Method RS-F**
Number of results	6	9
Number of outliers	0	0
Assigned Value (X_{pt})	23,3	63,1
Robust standard deviation	5,53	8,17
Standard uncertainty	2,82	3,40
Target standard deviation opt	5,82	15,8
Target range	11,6 – 34,9	31,5 – 94,6

* diverse ELISA Method: (all except RS-F): AQ = AgraQuant, RomerLabs, BC = BioCheck, MI-II = Morinaga Institute ELISA Kit II, SP = SensiSpec ELISA Kit, Gold Standard Diagnostics

** ELISA Method: RS-F= Ridascreen® Fast, R-Biopharm

Reference Values qualitative ELISA

Parameter	Mustard*	Pine Nut*	Sesame*
Number positive	14	2	17
Number negative	0	0	0
Percent positive	100	100	100
Percent negative	0	0	0
Consensus value	positive	positive	positive

* Results of diverse ELISA Methods (LODs are in the common range of the applied ELISA Testkits, for specific values see final report)

Reference Values quantitative in mg/kg PCR

Important note: The following quantitative data are given for information only, they cannot be used as valid reference values.

Parameter	Celery	
	All results* (Info)	Method SFA** (Info)
Number of results	6	5
Number of outliers	0	0
Assigned Value (Xpt)	67,2	48,3
Robust standard deviation	73,9	45,8
Standard uncertainty	37,7	25,6
Target standard deviation opt	16,8	12,1
Target range	33,6 – 101	24,2 – 72,5

* PCR Method: diverse Methods

** PCR Method: SFA = Sure Food ALLERGEN, R-Biopharm / Congen
(Info): for information only

Parameter	Mustard		Sesame
	All results* (Info)	Method SFA** (Info)	All results* (Info)
Number of results	7	6	4
Number of outliers	0	0	0
Assigned Value (Xpt)	45,6	39,9	17,7
Robust standard deviation	35,3	33,8	6,57
Standard uncertainty	16,7	17,3	4,10
Target standard deviation opt	11,4	10,0	4,43
Target range	22,8 – 68,4	20,0 – 59,9	8,86 – 26,6

* PCR Method: diverse Methods

** PCR Method: SFA = Sure Food ALLERGEN, R-Biopharm / Congen
(Info): for information only

Reference Values qualitative PCR

Parameter	Celery*	Mustard*	Pine Nut*	Sesame*
Number positive	29	25	4	17
Number negative	0	1	0	0
Percent positive	100	96	100	100
Percent negative	0	4	0	0
Consensus value	positive	positive	positive	positive

* Results of diverse PCR Methods (LODs are in the common range of the applied PCR Methods, for specific values see final report)

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, 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 31 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
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17 August 2026	17 August 2026	-