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Laboratory Animal Allergen Report

InBio® Services

Batch ID: 23-0350M

E=ELISA, M=MARIA, T=Endotoxin, Z=Enzyme

Stacy Botris

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Date Received: 10/18/2023
Date Assayed: 10/20/2023
Date Reported: 10/27/2023 11:07:22 AM

Mus m 1, Rat n 1, Orcy c 3 and Guinea Pig Urinary Protein (GPUP) results reported as nanogram allergen per filter (extracted in 1mL).

Accession:	*Sample:*	*Air Volume* (Liters):	*Mouse:* Mus m 1	*Rat:* Rat n 1	*Rabbit:* Ory c 3	*Guinea Pig:* GPUP
223-2362	1	536	1.46	2.78	131.57	185.62
223-2363	2	687	0.29	0.35	11.79	81.58

NES = Insufficient sample for the assay

Results apply only to the samples tested and provided by the customer.

The reporting limits are 0.01 ng/ml for Mus m 1; 0.02 ng/ml for Rat n 1; 0.16 ng/ml for Ory c 3 and 0.49 ng/ml for GPUP.

MARIA® allergen analysis data is aquired using Bio-Plex® 100/200 instrument and Bio-Plex® Manager 6.1 software.

Mus m 1, Rat n 1, Orcy c 3 and Guinea Pig Urinary Protein (GPUP) results reported as nanogram allergen per filter (extracted in 1mL).

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The current consensus occupational exposure limit (OEL) target applied by most industrial hygienists in pharma and biotech for Mus m 1 and Rat n 1 is 5 nanograms of allergen per cubic meter of air (5ng/m3). There are no established guidelines for occupational exposure to guinea pigs or rabbits, and the 5ng/m3 threshold often cited for airborne mouse (Mus m 1) and rat (Rat n 1) allergens may not apply to guinea pig urinary protein (GPUP) or rabbit allergen, Ory c 3.

LAA References:

1. **JOEM 2025; 67:376-384**
2. **InBio Occupational Exposure to LAA White Paper 2017**
3. **LAS Pro re March 2018:46-48**
4. **Occup. Med. 2003; 53:371-377**

This report furnishes information only and is not intended to be an interpretation of the results. Whether an individual suffers allergic symptoms or not depends not only on the level of allergens in his/her environment but also on his/her medical history and previous exposure.

Uncertainty of Measurement for MARIA®:

Der p 1	Der f 1	Mite Group 2	Fel d 1	Can f 1	Rat n 1	Mus m 1	Bla g 2
22.4	24.2	32.4	31.7	22.8	31.8	23.7	26.7

Allergen quantification using the MARIA® multiplex method is based on calibration standards formulated from purified natural or recombinant allergens, with concentration determined by optical density at 280 nm. Allergen concentrations determined using this method, and as provided in this Allergen Analysis Report, including limits of detection, are subject to the measurement uncertainty shown in the chart above (expressed as a percentage). For example, a reported value of 10µg/g Der p 1 could range from 7.76 to 12.24µg/g.

Report reviewed and approved by:
Stephanie Filep, BS
Director of Laboratory Services

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MARIA® allergen analysis was performed following SOP-001 and data was acquired using Bio-Plex® 100/200 instrument and Bio-Plex® Manager 6.2 software.