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Inhalable Allergen Analysis Report

InBio® Services

Batch ID: 23-0350M

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

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Project ID# 1234567

Date Received: 10/18/2023
Date Assayed: 10/20/2023
Date Reported: 10/27/2023 11:14:50 AM

Der p 1, Der f 1, Mite Group 2, Fel d 1, Can f 1, Rat n 1, Mus m 1 and Bla g 2 results reported as microgram allergen per gram dust.

		Mite Allergens:			*Cat:*	*Dog:*	*Rat:*	*Mouse:*	*Cockroach:*
Accession:	***Sample:***	**Der p 1**	**Der f 1**	**MG2**	**Fel d 1**	**Can f 1**	**Rat n 1**	**Mus m 1**	**Bla g 2**
223-2362	1	1.783	0.245	1.591	38.258	10.879	<0.004	0.924	0.526
223-2363	2	<0.012	<0.012	<0.004	3.546	0.741	<0.004	<0.002	<0.196

NES = Insufficient sample for the assay

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

The reporting limits are 0.012 µg/g for Der p 1, Der f 1 and Can f 1; 0.004 µg/g for MG2, Fel d 1 and Rat n 1; 0.002 µg/g for Mus m 1 and 0.196 µg/g for Bla g 2.

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

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Guidelines:*	**The following guidelines for Dermatophagoides mite, cat, dog and cockroach allergen levels in house dust have been proposed:**				**1,2,3,6**
		MITE Group 1	**CAT/DOG**	**Bla g 1**	**Bla g 2**
LOW	**(not sufficient to cause allergic symptoms)**	**< 2 µg Mite Group 1/g dust**	**< 0.2 µg Fel d 1 or Can f 1/g dust**	**< 0.10 µg Bla g 1/g dust**	**< 0.20 µg Bla g 2/g dust**
SIGNIFICANT	**(risk for sensitization and bronchial hyperactivity)**	**2-10 µg Mite Group 1/g dust**	**8-20 µg Fel d 1 or Can f 1/g dust**	**0.10-0.80 µg Bla g 1/g dust**	**0.20-0.4 µg Bla g 2/g dust**
HIGH	**(risk for acute asthmatic attack)**	**> 10 µg Mite Group 1/g dust**	**1-8 µg Fel d 1 or Can f 1/g dust**	**>0.80 µg Bla g 1/g dust**	**> 1 µg Bla g 2/g dust**

CAT/DOG **The results of two studies have observed that increased exposure to high levels of Fel d 1 and Can f 1 have caused individuals to develop a tolerance, which means that individuals could potentially be exposed to 8-20 µg/g dust and only experience mild allergic symptoms. Individuals with less exposure to high levels of Fel d 1 and Can f 1 (1-8µg/g dust) may experience more severe allergic symptoms. 2,4,6**

COCKROACH **Some investigators feel that any detectable level of cockroach allergen is clinically significant because its presence identifies a building in which persons who are cockroach allergic are at risk to develop symptoms because of exposure. 5,6**

1. J. Allergy Clin Immunol 1989; 83:416-427.

2. Amer Rev Respir Dis 1990; 141:361-367

3. Amer Rev Respir Dis 1993; 147:573-578

4. Amer J Res Crit Care Med 1997; 155:94-98

5. J. Allergy Clin Immunol 1997; 100:S1-S24

6. Pediatric Allergy Principles and Practice 2003; 261-68

*** 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 Amino Acid Analysis. 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 10ug/g Der p 1 could range from 7.76 to 12.24ug/g.

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

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