

**Indoor Allergen Analysis Report
 Allergen Analysis Results**

 InBio® Services

Batch ID: 21-0468M

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

Enthalpy Analytical

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Project ID#: Enthalpy/Prism CoC #####

Der p 1, Der f 1, Fel d 1, Can f 1, and Bla g 2 results reported as microgram allergen per gram dust.

| Accession: | Sample: | Mite Allergens: | | Cat: | Dog: | Cockroach: |
|------------|-----------|-----------------|---------|---------|---------|------------|
| | | Der p 1 | Der f 1 | Fel d 1 | Can f 1 | Bla g 2 |
| 221-4070 | 1st floor | <0.012 | <0.012 | 0.087 | 0.039 | <0.196 |
| 221-4071 | 2nd floor | <0.012 | 0.938 | 0.821 | 0.712 | <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 ug/g for Der p 1, Der f 1 and Can f 1; 0.004 ug/g for Fel d 1; and 0.196 ug/g for Bla g 2.

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

Sample Report

Der p 1, Der f 1, Fel d 1, Can f 1, and Bla g 2 results reported as microgram allergen per gram dust.

| Accession: | Sample: | Mite Allergens: | Cat: | Dog: | Cockroach: | |
|--------------|--|---|------------------------------------|-----------------------------|----------------------------|---------|
| | | Der p 1 | Der f 1 | Fel d 1 | Can f 1 | Bla g 2 |
| 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. | 4. Amer J Res Crit Care Med 1997; 155:94-98 | | | | |
| | 2. Amer Rev Respir Dis 1990; 141:361-367 | 5. J. Allergy Clin Immunol 1997; 100:S1-S24 | | | | |
| | 3. Amer Rev Respir Dis 1993; 147:573-578 | 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 | Bla g 2 |
|---------|---------|--------------|---------|---------|---------|
| 22.4 | 24.2 | 32.4 | 31.7 | 22.8 | 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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