PRO-LAB®
The Professional's Choice for Environmental Testing℠
1675 N. Commerce Parkway, Weston, FL 33326
Tel: (954) 384-4446 Fax: (954) 332-1005 www.reliablelab.com

Certificate of Allergen Analysis

Report Number: xxxxxx-0123

Prepared for: Client
Address
City, ST zip

Phone Number: (xxx) xxx-xxxx
Fax Number:

Email Address: email

Test Location: name
address
city, ST zip

Collection Location: location
Collection Date: February 15, 2010
Receive Date: February 17, 2010
Report Date: February 22, 2010

This report is not intended to be a statement of medical condition, recommendation or conclusion. Interpretive guidelines currently exist only for Dust Mite and Cat Allergens. These guidelines are listed at the end of this report. Individual susceptibility depends on the time spent exposed to a particular allergen and previous exposure history.

No specific individual risk thresholds have been established for most allergens. Sensitization to allergens is primarily, but not exclusively, respiratory.

Among sensitized individuals, allergic symptoms may be triggered over a range of allergen concentrations. Further information on allergen levels associated with increased risk of sensitization among atopic individuals can be found in the "Field Guide for the Determination of Biological Contaminants in Environmental Samples", edited by L-L. Huang, et al. 2005, American Industrial Hygiene Association, ISBN 1-931504-62-8.

Excellent websites for general information on allergens can be found at: 1) http://www.niehs.nih.gov/health/topics, 2) http://www.aaaai.org, 3) http://allergies.about.com, 4) http://www.aanma.org.

For more information please contact PRO-LAB® at 954-384-4446

PRO-LAB®
The Professional's Choice for Environmental Testing℠
1675 N. Commerce Parkway, Weston, FL 33326
Tel: (954) 384-4446 Fax: (954) 332-1005 www.reliablelab.com

Report Number: xxxxxx-0123

Collection Location: location
Collection Date: February 4, 2010
Report Date: February 16, 2010
Receive Date: February 10, 2010

SUMMARY OF INDOOR ALLERGEN REPORT

Sample Request: Allergen Combo (Der f1, Der p1, Bla g2, Fel d1, Can f1)
Sample Amount: 100 mg

Allergen concentrations with known threshold risk levels.

ALLERGEN NAME	RESULTS*	EVALUATION	THRESHOLD LIMITS
Cat Allergen (Fel d1)	1.027 µg/g	(HIGH)	<1 µg/g
Dust Mite (Der f1)	2.106	(HIGH)	<2 µg/g
Cockroach (U/g) (Bla g1)			2U/g
Cockroach (U/g) (Bla g2)	BDL		2U/g

Allergen concentrations with no known threshold risk levels. Detectable levels indicate a risk of exposure.

ALLERGEN NAME	RESULTS	EXPOSURE EVALUATION
Dog Allergen (Can f1)	0.32 µg/g	(exposure likely)
Dust Mite (Der p1)	0.019 µg/g	(exposure likely)
Mold Allergens (Alt a1)		
Mold Allergens (Asp f1)		
Mouse Allergens (Mus m1)	0.53 µg/g	(exposure likely)
Rat Allergens (Rat n1)		

*Micrograms per gram (µg/g); Units per gram (U/g); BDL=below detection limit
Low = a level below which an allergic reaction is likely.
Significant = a level above which an allergic reaction is more likely.
High = a level where there is a risk of acute asthmatic reaction.
Exposure likely = a measureable amount of allergen was detected, but no threshold level has been determined.
Exposure unlikely = no measureable amount of allergen was detected.
(Cat Allergens (<1 µg/g = low; 1-8 µg/g = significant; >8 µg/g = high)
(Mite Allergens levels (<2 µg/g = low; 2-10 µg/g = significant; >10 µg/g = high)
Level of Detection Limit (ng/mL): Alt a1=0.02; Asp f1=0.08; Bla g1=0.002; Bla g2=0.39; Can f2=0.98; Der f1=0.49; Der p1=0.49; Fel d1=0.25; Mus m1=0.05; Rat n1=0.2

Test Method: An ELISA (Enzyme-linked immunosorbent assay) is performed on a 100 mg of sample that is extracted in a buffered solution and the allergens are reported in "micrograms per gram". The cockroach allergens are reported in units per gram of dust. "Units per gram of dust" is an historical threshold established by clinicians and has no conversion to "micrograms per gram of dust".

PRO-LAB®
The Professional's Choice for Environmental Testing℠
1675 N. Commerce Parkway, Weston, FL 33326
Tel: (954) 384-4446 Fax: (954) 332-1005 www.reliablelab.com

Glossary

Allergen: A substance that causes an allergic reaction.
Allergy: An acquired damaging response to a particular substance (sensitization), called an allergen, by the body's immune system to which it has become hypersensitive.
Antibody: A Y-shaped protein found in human bodily fluids that are used by the immune system help direct an appropriate response for each different type of foreign object they encounter (like allergens).
Antigen: A molecule that stimulates an immune response (antibody generation). These can be found on pollen, animal dander, food, etc.
Asthma: A chronic respiratory disease, often caused by an allergic reaction, causing difficulty in breathing, inflammation and constriction of the airways. Symptoms can be mild to severe.
Atopic: The genetic predisposition for the development of an immunoglobulin E (IgE)-mediated response to common allergens. It is the strongest identifiable predisposing factor for developing asthma.
Cat Allergy: A reaction to the glycoprotein Fel d 1 secreted by the cat's oil glands and is mostly found on the cat's skin and in their saliva.
Cockroach: One of the most common and allergenic of all indoor pests that are active primarily at night. A national study has shown that cockroach allergens appear to worsen asthma symptoms in persons allergic to cockroaches. The two most common types of cockroaches that live indoors in North America are the American cockroach (*Periplaneta americana*), and the German cockroach (*Blatella germanica*). The levels of cockroaches and allergens are directly related to cockroach population density, housing disrepair, and sanitary conditions.
Dander: Material shed from the body of animals, similar to dandruff that can cause allergic reactions in humans.
Dog Allergy: A reaction to the protein Can f 1 found in dog dander. This is no established risk threshold.
ELISA: Enzyme-Linked ImmunoSorbent Assay is a biochemical technique used to detect the presence of an antibody or antigen in a dust sample.
Gram: A metric unit of mass equal to approximately 28 ounces.
House Dust mite: Tiny microscopic relatives of spiders that live on mattresses, bedding, upholstered furniture, carpets and curtains. They are often abbreviated by allergists as HDM and are considered the most common cause of allergy and asthma. Dust mites thrive in house dust. They can be transported in the air by normal household activities. There are two commonly occurring dust mites 1) the American house dust mite, (*Dermatophagoides farinae*) and 2) the European house dust mite, (*Dermatophagoides pteronyssinus*).
Microgram: One millionth of a gram.
Mold Allergy: A reaction to mold proteins, e.g., Asp f 1 (Aspergillus fumigatus) and Alt a 1 (Alternaria alternata). This is no established risk threshold.
Mouse Allergy: A reaction to the protein Mus m 1 found in mouse dander. This is no established risk threshold.
None Detected (ND): No allergen detected because it is not present in the sample or the amount present may be lower than the capability of the analytical method.
Level of Detection: The lowest quantity of allergens that can be reliably distinguished from a blank value.
Rat Allergy: A reaction to the protein Rat n 1 found in rat dander. This is no established risk threshold.
Sensitization: The production of specific antibodies (IgE) as a response to the exposure to allergens.
Threshold Limit Value: Adopted from "Field Guide for the Determination of Biological Contaminants in Environmental Samples", L-L. Hung, et al., 2nd edition, American Industrial Hygiene Association Biosafety & Environmental Microbiology Committee, 2005, and the references contained therein. In general, the level to which a person can be exposed without adverse health effects
Units per gram: Units of allergen per gram.

END OF REPORT