Did you know that approximately 25% of the population is allergic to one or more indoor air allergens? Common indoor air allergens include conjunctivitis and rhinitis, as well; sources include pets, insects, plants and microorganisms. Allergen exposure has been implicated in a variety of diseases including asthma, sinusitis, and the development of childhood asthma has been associated with exposure to dust mite and cockroach allergens. The levels of allergens in the accumulated dust throughout a home can be significant to a doctor or allergist when trying to determine whether an individual’s level of exposure is significant.

What, exactly, is an allergen? An allergen is a substance, usually a protein, which stimulates the production of an antibody that causes immediate hypersensitivity, otherwise known as an allergic reaction. In the case of dust mites, cockroaches and cats, the allergen is a protein they produce. Der p1 and Der f1 are the major allergens from the dust mite species *Dermatophagoides pteronyssinus* and *Dermatophagoides farinae* respectively. The primary allergen for a cat is a small stable protein, Fel d1, while one of the major German cockroach allergens is Bla g1. We are exposed to allergens from mites and cockroaches primarily by the inhalation of fecal particles and the secretions they produce, these secretions can adhere to dust particles and become airborne in your home. Mite allergens have a lower tendency of becoming airborne and as a result exposure usually occurs while sleeping in direct contact with mite infested bedding. Cat allergens are found in the saliva and secretions coating their fur, these allergens can accumulate in furnishings as well as becoming airborne in very high levels.

Paracel Laboratories Ltd. provides routine allergen analysis for Der f1, Der p1, Fel d1 and Bla g1 in dust samples. Allergen quantification is performed by Enzyme-Linked Immunosorbent Assay, also known as ELISA. Dust samples from your home can be collected using a standard vacuum or by using a filter cassette with a 0.45 micron polycarbonate, please call the laboratory for sampling instructions and supplies.

Our usual turnaround time for allergen analysis is 5 business days, depending upon the number of samples and quantity of allergens to be analysed. If you are concerned about any other allergens in your home, Paracel Laboratories Ltd. will be more than willing to accommodate your request.

---

The Service Team at Paracel is fully committed to continuous improvement and providing complete solutions to our clients in respect to their analytical requirements. If you have any questions in regards to this document or your sampling program, please don’t hesitate to contact Paracel’s Service Team at 1-800-749-1947 or by email at paracel@paracellabs.com.

**ENVIRONMENTAL AND INDOOR AIR QUALITY TESTING SERVICES**

1-800-749-1947 • www.paracellabs.com