



Paracel's *Stachybotrys chartarum* ELISA Kit

Paracel Laboratories Ltd. (Paracel) is pleased to announce the commercial release of our *Stachybotrys chartarum* ELISA kit for the quick quantification and reliable detection of a *S. chartarum* antigen in dust and bulk samples.

This capture ELISA uses monoclonal antibodies to a protein known to be antigenic in humans that is produced on building materials such as paper-faced wallboard and other natural substrates. The assay has a detection limit of 0.2 ng SchS34 antigen/g sieved settled dust (0.2 ppb). This is comparable to assays for dust mite and *Aspergillus fumigatus* allergens. It has low cross-reactivity when screened against other common indoor fungi. This assay has been validated on real-world samples, by other researchers and other laboratories.

Basic Research and Publications

The initial research and development of the *S. chartarum* ELISA was completed at Carleton University in Ottawa, Canada. Paracel is the primary industrial sponsor of a project to study the toxins and allergens of fungi found on damp building materials in partnership with the Natural Sciences and Engineering Research Council of Canada (NSERC). The research describing the development of the *S. chartarum* ELISA has been published in peer reviewed journals with high impact factors (Int Biodeg Biodeterio 60:308; J. Immunol Methods 332:121; Mycopathologia 165:73). Additional publications related to the full sequence of the antigen are in progress.

Please do not hesitate to ask about future research directions. Our second ELISA expected later this year will be for the most common species of *Penicillium* on building materials, *P. chrysogenum*. ELISA kits for other species representing other communities of damp building fungi are under development.

Background – ELISA for Fungal Allergens

The United States National Academy of Science report on asthma ("*Clearing the Air*", 2000) recommended that exposure assessment for fungi be based on allergens/antigens rather than culture or other methods to assess the health impacts of fungi. The ELISA approach is currently used to measure many common household allergens such as dust mites, cockroach and cat.

Research, regulatory and commercial laboratories will be able to utilize Paracel's ELISA kits to make important advances in the assessment of exposure to fungal allergens, regardless of viability and sample composition (spores, spore and mycelial fragments, or even smaller particles known to comprise the large majority of exposure to fungi indoors).

Technical Questions & Ordering Information

For technical, pricing and ordering information on this new product, please contact:

Don Belisle, MSc., Senior Microbiologist

dbelisle@paracellabs.com, (613) 731-9577

Blair Colquhoun, President

bcolquhoun@paracellabs.com, (613) 731-9577

