1216 HARRIS STREET
CHARLOTTESVILLE
VA 22903
U.S.A

TEL: (1) 434 984 2304
FAX: (1) 434 984 2709
WWW.INBIO.COM

INDOOR® Biotechnologies Dust Sample Extraction Procedure

1. Sieve dust through a No. 45 mesh screen, 355µm diameter (VWR No. 57332146) to remove large particles and fibers.*

2. Weigh 100 mg (±5mg) fine dust into a 75mm x 12 mm plastic test tube (Sarstedt No. 55.476). If less than 100mg we will take out 10mg for extraction.

3. Add 2.0ml PBS-T (0.05% Tween 20 in phosphate buffered saline, pH 7.4) to a sample weighing 100mg. For samples between 10mg and 100mg add the proportional amount needed. The amount of dust in mg is multiplied by 20 to give the appropriate volume of buffer in µL needed. Samples <10mg are labeled as "Not Enough Sample" and not processed.

4. Resuspend using a vortex mixer (Vortex-Genie, Fisher Scientific).

5. Mix end over end for 2 hours on a laboratory rocker (Labquake Shakers, Fisher Scientific, Cat# 13-687-17) at room temperature.

6. Centrifuge 20 minutes at 2,500 rpm 4°C.

7. Remove supernatant (approximately 1.5ml) with a Pasteur pipette, for measurement of antigen. Discard dust pellet.

8. Store extract (supernatant) at -20°C in a freezer vial with sample number or relevant code clearly labeled for future analysis of allergen content.

*Whether to sieve the dust or not is determined by the quality of the dust. We do not routinely sieve dust collected from beds and soft furnishings. Carpet samples are sieved (e.g. using a No. 45 mesh screen, 355µm diameter sieve) to separate the fiber and large particles from fine dust.

We recommend the use of the DUSTREAM™ which greatly reduces the need for sieving dust. After collecting a dust sample using the DUSTREAM™ dust collector, remove the nylon filter containing the dust sample, invert the filter and tap the dust onto a piece of weigh paper. The fine dust falls before the fibers come out of the filter.