#### References:

- Chapman, M.D., Sutherland, W.M., and Platts-Mills, T.A.E. (1984). Recognition of two Dermatophagoides pteronyssinus specific epitopes on Antigen P1 using monoclonal antibodies: Binding to each epitope can be inhibited be sera from mite allergic patients. J. Immunol. 133:2488-2495.
- Ford, A.W., Rawle, F.C., Lind, P., Spieksma, F.Th.M., Lowenstein, H. and 2. Platts-Mills, T.A.E. (1985). Standardization of Dermatophagoides pteronyssi nus: Assessment of potency and allergen content in ten coded extracts. Int. Archs. Alleray Appl. Immunol. 76:58-68.
- Heymann, P.W., Chapman, M.D., and Platts-Mills, T.A.E. (1986). Antigen Der f 3. I from the dust mite Dermatophagoides farinae: Structural comparison with Der p I from D. pteronyssinus and epitope specificity of murine IgG and human IgE antibodies. J. Immunol. 137:2841-2847.
- Chapman, M.D., Heymann, P.W., Wilkins, S.R., Brown, M.J., and Platts-Mills, 4. T.A.E. (1987). Monoclonal immunoassays for major dust mite (Dermatophagoides) allergens, Der p I and Der f I, and quantitative analysis of the allergen content of mite and house dust extracts. J. Allergy Clin. Immunol.
- Platts-Mills, T.A.E. and Chapman, M.D. (1987). Dust mites: Immunology, aller 5. gic disease and environmental control. J. Allergy Clin. Immunol. 80:755-775.
- Chapman, M.D., Heymann, P.W., and Platts-Mills, T.A.E. (1987). Epitope map 6. ping of two major inhalant allergens, Der p I and Der f I, from mites of the genus Dermatophagoides. J. Immunol. 139:1479-1484.
- Chapman, M.D. (1988). Allergen specific monoclonal antibodies: New tools for 7. he management of allergic disease. Allergy 43 (5):7-14.
- Luczynska, C.M., Arruda, L.K., Platts-Mills, T.A.E., Miller, J.D., Lopez, M., and Chapman, M.D. (1989). A two-site monoclonal antibody ELISA for the quanti fication of the major Dermatophagoides spp. allergens. Der p I and Der f I. J. Immunol. Meths. 118:227-235.
- 9. Platts-Mills TAE, Thomas WR, Aalberse RC, Vervloet D and Chapman MD. ( 1992). Dust mite allergens and asthma: Report of a second international work shop. J Allergy Clin Immunol 89:1046-1060.

## Developed and manufactured by:



www.inbio.com

Indoor Biotechnologies, Inc. 1216 Harris Street, Charlottesville, VA 22903 United States

Tel: (434) 984-2304 Fax:(434) 984-2709 Indoor Biotechnologies Ltd The Old Brewery 38, High Street, Warminster Wiltshire, BA12 9AF United Kingdom

Tel: 44 (0)5601 153 291 Fax: 44 (0)1985 218300

E-mail: info@indoorbiotech.co.uk

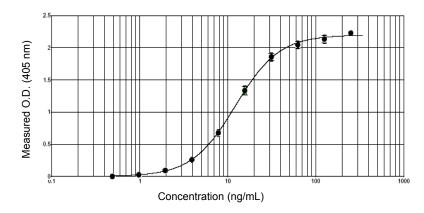




# Der p 1 ELISA kit (10B9/5H8)

**Product Code: EL-DP1A** Lot: 31034

## Sample Curve:



#### Content:

Vial 1 (red top) 200 µl

Monoclonal antibody 10B9 Concentration: 1mg/ml in PBS

Vial 2 (white top) 2 x 400 µl

Der p 1 Standard

Concentration: 2500ng/ml

Vial 3 (brown) 200 ul

Biotinylated monoclonal antibody 5H8

Dilute: 1:1000 for use

Storage: All reagents should be stored at 4°C

### **Certificate of Analysis**

Monoclonal Antibody: 10B9 Der p 1 Immunogen: Isotype: Mouse IaG1 Specificity:

Binds to a common epitope on mite Dermato phagoides pteronyssinus allergen, Der p 1.

Purification: Produced in tissue culture by hollow fiber

fermentation and purified by chromatography using

Protein A. Single heavy and light chain bands on SDS-

PAGE

Concentration: 1.0mg/ml in phosphate buffered saline, pH 7.2.

Based on A280 for IgG (1.42= 1mg/ml) 0.22µm

filtered, preservative free.

Lot Number: XXXXX

Monoclonal Antibody: 5H8 (clone 5H8 C12 D8)

Der p 1 Immunogen: Isotype: Mouse IgG2A

Specificity: Binds to a common epitope on mite Dermato

phagoides pteronyssinus allergen, Der p 1. Produced in tissue culture by hollow fiber

> fermentation and purified by chromatography using Protein A. Single heavy and light chain bands on

SDS-PAGE

Biotinylation: Biotinylated using EZ-Link Sulfo-NHS-LC Biotinylat

ing Agent and titrated for use in for mite Group 1

allergen at 1/1000 dilution. Prepared in

1% BSA/50% glycerol/PBS.

Lot Number: XXXXX

Allergen Standard: Universal Allergen Standard

A formulation of eight purified natural allergens Composition:

prepared in 1% BSA/50% alvcerol/PBS, pH 7.4

Concentration/Calibration:

Purification:

**Lot Number** XXXXX

Universal Allergen Standard	Protein Measurement	Concentration (ng/ml)
Der p 1	Amino-acid analysis	2500
Der f 1	Amino-acid analysis	2500
Der p 2	Amino-acid analysis	1000
Fel d 1	Amino-acid analysis	1000
Can f 1	Amino-acid analysis	2500
Rat n 1	Amino-acid analysis	1000
Mus m 1	Amino-acid analysis	250
Bla g 2	Amino-acid analysis	2500

# ELISA protocol for Der p 1

- 1. Anti Der p 1 mAb 10B9 is supplied HPLC purified as a stock solution at 1mg/ml in PBS. Coat polystyrene microtiter wells (NUNC Maxisorp Cert. NUNC catalog #439454, Fisher Catalog #12565135) with 200ng/well mAb 10B9 (i.e. 0.1ml 1/1000 dilution of mAb) in 50mM carbonate-bicarbonate buffer, pH 9.6, overnight at 4°C.
- 2. Wash wells 3x with PBS-0.05% Tween 20, pH 7.4 (PBS-T). Incubate for 1 hour with 0.1ml 1% BSA PBS-T then wash 3x with PBS-T and dry.
- 3. Add 100µl of diluted allergen standard, house dust or air filter samples. Incubate for 1 hour at room temperature.
  - 3a. Make a Der p 1 control curve using doubling dilutions of the allergen standard (Product Code: ST-DP1): The control curve dilutions are from 250 - 0.5ng/ml Der p 1. Pipette 20µl Der p 1 standard into 180µl 1% BSA PBS-T into wells A1 and B1 of the ELISA plate. Mix well and transfer 100µl across the plate into 100µl 1% BSA PBS-T diluent to make 10 serial doubling dilutions. Wells A11, B11, A12 and B12 should contain only 1% BSA PBS-T as blanks.
  - 3b. House dust samples are routinely diluted two-fold from 1/10-
- 4. Wash wells 3x with PBS-T, then incubate for 1 hour with 0.1ml 1/1000 dilution of biotinylated anti Group 1 mAb 5H8.
- 5. Wash wells 3x and incubate for 30 minutes with 0.1ml 1/1000 dilution of Streptavidin - Peroxidase (Sigma S5512, 0.25mg reconstituted in 1ml distilled water). The Streptavidin should be diluted in 1% BSA PBS-T. Wash wells 3x and develop the assays by adding 0.1ml 1mM ABTS in 70mM citrate phosphate buffer, pH 4.2 and 1/1000 dilution of H<sub>2</sub>O<sub>2</sub>.
- 6. Read the plate when the absorbance (405nm) reaches 2.0-2.4 or stop the reaction by adding 0.1ml 2mM sodium azide. Absorbance readings are directly proportional to the quantity of Der p 1 bound and values are interpolated from the respective control curves.

Notes: The Der p 1 standard contains 2500ng/ml Der p 1 and has been substandardized against the WHO/IUIS D. pteronvssinus reference (NIBSC 82/518), which contains 12.5µg/ml Der p 1(9,10).

Buffer recipes, storage conditions and a list of frequently asked questions can be found under "Protocols" on our web site: www.inbio.com

For Research Use Only: Not for Diagnostic or Therapeutic Use