### **References:**

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- 5. Platts-Mills TAE, Vervloet D, Thomas WR, Aalberse RC, Chapman MD. Indoor Allergens and Asthma: Report of the Third International Workshop. J Allergy Clin Immunol, 1997; 100:S1



# Mite Group 2 ELISA kit (1D8/7A1)

Product Code: EL-D2 Lot Number: XXXXX

Sample Curve:



## Content:

- Vial 1 (red top) 100 µL Monoclonal antibody 1D8
- Vial 2 (white top) 400 µL Universal Allergen Standard Concentration: 1000ng/ml Der p 2
- Vial 3 (brown) 100 µL Biotinylated monoclonal antibody 7A1 Dilute: 1:1000 for use

## Storage: The ELISA kit should be stored at 4°C

For research and commercial use in vitro: not for human in vivo or therapeutic use. An InBio<sup>®</sup> product



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Indoor Biotechnologies, Inc. 700 Harris Street, Charlottesville, VA 22903 United States

Tel: (434) 984-2304 Fax:(434) 984-2709 Email: mail@inbio.com Indoor Biotechnologies Ltd. Vision Court Caxton Place Cardiff, Wales CF23 8HA United Kingdom

Tel: +44 (0) 29 2167 4640 Email: Info@indoorbiotech.co.uk Indoor Biotechnologies, India Private Limited Bangalore Bioinnovation Centre, BioTech Park, Electronic City Phase 1 Bangalore-560100, India

Tel: +91-9901722009 Email: info@inbioindia.com



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# **Certificate of Analysis**

Monoclonal Antibody: Immunogen: Isotype: Specificity: Purification:	1D8 (clone 1D8 C4 D8) Der p 2 Mouse IgG2A Binds to an epitope on dust mite <i>Dermatophagoides</i> Group 2 allergens, Der p 2 and Der f 2. Produced in ascites and purified by ammonium sulphate precipitation and affinity chromatography using Protein A. Single heavy and light chain bands on SDS-PAGE.	
Concentration:	1.35 mg/ml in phosphate buffered saline, pH 7.4 Based on A280 for IgG (1.42=1mg/ml), 0.22µm filtered, preservative free.	
Managlang Antibady:	Pictin 701 (clone 701 H1 C2)	
Monoclonal Antibody: Immunogen:	Biotin 7A1 (clone 7A1 H1 G3) Der f 2	
Isotype:	Mouse IgG1	
Specificity:	Binds to an epitope on dust mite <i>Dermatophagoides</i> Group 2 allergens, Der p 2 and Der f 2. Produced in ascites and purified by affinity chromatography using Protein A. Single heavy and light chain bands on SDS-PAGE.	
Purification:		
Biotinylation:	Biotinylated and titrated for use in ELISA at 1/1000 dilution. Prepared in 1% BSA/50% glycerol/PBS, pH 7.4, 0.22µm filtered, preservative free.	
Lot Number:	xxxxx	
Allergen Standard:	Universal Allergen Standard	

Composition: A formulation of eight purified natural allergens prepared in 1% BSA/50% glycerol/PBS, pH 7.4 xxxxx

#### Concentration:

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 Mite Group 2 Allergens.

- 1. Coat polystyrene microtiter plates (NUNC Maxisorp Cert. NUNC catalog # 439454) with 100μl mAb 1D8 at 10μl/10ml, i.e. 1/1000 dilution of stock, in 50mM carbonate-bicarbonate buffer, pH 9.6, incubate overnight at 4°C.
- Wash wells 3x with PBS-0.05% Tween 20, pH 7.4 (PBS-T). Incubate for 30 min. at room temperature with 100µl/well of 1% BSA, PBS-T. Wash 3x with PBS-T.
- 3. Use doubling dilutions of the Universal Allergen Standard to make a control curve ranging from 100 0.2ng/ml Der p 2: Pipette 20µl Universal Allergen Standard into 180µl 1% BSA, PBS-T into wells A1 and B1 on 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 and A12, B12 should contain only 1% BSA, PBS-T as blanks.
- 4. Add 100µl of diluted allergen samples and incubate for 1 hour at room temperature. House dust extracts for Der p 2 analysis are routinely diluted two-fold from1/10-1/80. Other sample types, like air filter extracts and allergen extracts, may require different dilutions.
- 5. Wash wells 3x with PBS-T and add 100µl diluted biotinylated anti mAb 7A1. The antibody solution contains 50% glycerol and should be diluted 1/1000 in 1%BSA, PBS-T. Incubate for 1 hour at room temperature.
- Wash wells 3x and add 100µl diluted Streptavidin Peroxidase (Sigma S5512, 0.25mg reconstituted in 1ml distilled water). The Streptavidin Peroxidase should be diluted 1/1000 in 1% BSA, PBS-T. Incubate for 30 minutes at room temperature.
- 7. Wash wells 3x and develop the assays by adding 100 $\mu$ l 1mM ABTS in 70mM citrate phosphate buffer, pH 4.2 and 1/1000 dilution of H<sub>2</sub>O<sub>2</sub>. Read the plate when the absorbance at 405nm reaches 2.0-2.4.

### Notes:

Universal Allergen Standard is recommended for immunoassay calibration purposes only. Not recommended for in-vitro antibody measurements, T cell studies, immunization purposes, or other uses.

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 and commercial use in vitro: not for human in vivo or therapeutic use.