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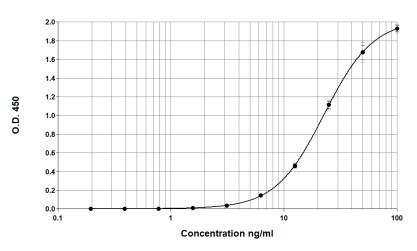




Bet v 1 ELISA kit (4B10/2E10)

Product Code: EL-BV1 Lot XXXXX

Sample Curve:



Content:

Vial 1 (red top) 100 ul Monoclonal antibody 4B10

Vial 2 (white top) 400 µl rBet v 1 Standard Concentration: 1.000ng/ml

Vial 3 (brown) 100 µl

Biotinylated monoclonal antibody 2E10

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® product

Certificate of Analysis

Monoclonal Antibody: 4B10 (clone 4B10 D10 F8)

Immunogen: Birch pollen extract

Isotype: Mouse IgG1

Specificity: Binds to multiple isoforms of *Betula verrucosa*

allergen, Bet v 1.

Purification: Produced in tissue culture and purified by

affinity chromatography using Protein A. Single heavy and light chain bands on

SDS-PAGE.

Concentration: 1.05mg/ml in phosphate buffered saline, pH

7.4.Based on A280 for IgG (1.42=1mg/ml)

0.22µm filtered, preservative free.

Lot Number: xxxxx

Monoclonal Antibody: 2E10 (clone 2E10 G6 G7)

Immunogen: Birch pollen extract

Isotype: Mouse IgG1

Specificity: Binds to a non-overlapping, conserved epitope

on Bet v 1.

Purification: From tissue culture by ammonium sulphate

precipitation and purified by affinity

chromatography using Protein A. Single heavy

and light chain bands on SDS-PAGE.

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: rBet v 1a

Composition: Recombinant Bet v 1a prepared in 1%

BSA/50% glycerol/PBS, 0.22µm filtered,

preservative free, pH 7.4

Concentration: 1,000ng/ml Bet v 1

Calibration: The rBet v 1a was produced from *Pichia* and

purified by a multi-step chromatography procedure. Validity of the rBet v 1 standard was confirmed by comparison with the European Pharmacopoeia reference CRS (Y0001565), recombinant major allergen rBet v 1 containing 10.25µg of rBet v 1 per vial.

Lot Number xxxxx

ELISA protocol for Bet v 1

- 1. Coat polystyrene microtiter plates (NUNC Maxisorp Cert. NUNC catalog # 439454) with 100μl mAb 4B10 at 10μl/10ml, i.e. 1/1000 dilution of stock, in 50mM carbonate-bicarbonate buffer, pH 9.6, incubate overnight at 4°C.
- 2. 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 rBet v 1 standard to make a control curve ranging from 100 0.2ng/ml Bet v 1: Pipette 20µl Bet v 1 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 Bet v 1 analysis are routinely diluted two-fold from 1/10-1/80. 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-Bet v 1 mAb 2E10. The antibody solution contains 50% glycerol and should be diluted 1/1000 in 1%BSA, PBS-T. Incubate for 1 hour at room temperature.
- 6. Wash wells 3x with PBS-T and add 100µl diluted Streptavidin-Peroxidase (Sigma S5512, 0.25mg reconstituted in 1ml distilled water). The reconstituted Streptavidin 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_2O_2 . Read the plate when the absorbance at 405nm reaches 2.0-2.4.

Notes:

The Bet v 1 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.