

# Monoclonal Anti-Birch pollen allergen Bet v1 antibody

**Product reference: DDX0050-DDX0052**

## Description:

Bet v 1 and homologous proteins represent major allergens for almost 95% of patients allergic to tree pollen and approximately 70% of those allergic to fruits and vegetables. Birch pollen allergy is a frequent pathology with IgE reactivity against Bet v 1. A panel of 85 mouse monoclonal anti-Bet v 1 antibodies was raised as a tool to study the interaction of human IgE antibodies with Bet v 1. Cross-reactivities with Bet v 1 homologous plant allergens, modulation of IgE binding to Bet v 1, Bet v 1 immunopurification, and inhibition of histamine release are described in the original article. (*Lebecque S et al, J Allergy Clin Immunol, 1997; 99:374-84*).

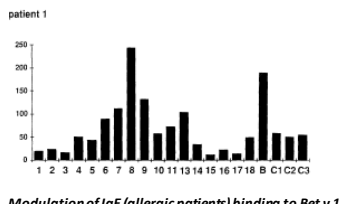
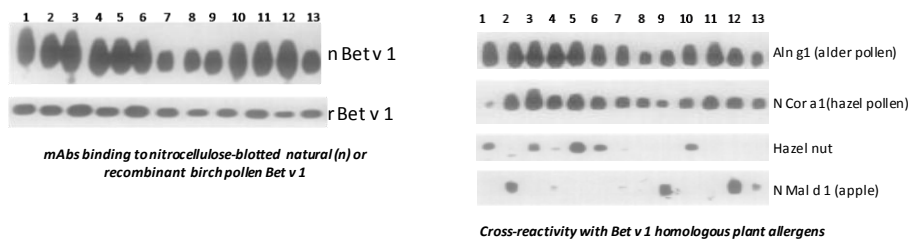
**Clone:** 102H10.05 (mAb2), 110G10.01 (mAb 13), 202B8 (mAb7)  
**Species:** BALB/c mouse  
**Specificity:** Birch pollen Bet v 1  
**Cross-reactivity:** Bet v 1 homologous plant allergens  
**Immunogen:** pollen grains from *Betula alba*  
**Purification:** QMA Hyper-D Ion-exchange chromatography  
**Formulation/size:** **Purified:** 100 µg in 200 µl Tris-NaCl pH 8  
**Coupled:** 100 µg in 200 µl PBS 50% glycerol

## Available references:

Reference		Format	Clone	Isotype	Applications tested
50µg	100µg				
DDX0050P-50	DDX0050P-100	Purified	102H10.05	IgG1	Binding to nitrocellulose-blotted Bet v 1, inhibition of human IgE binding to Bet v1, cross-competition with anti-Bet v1 mAbs
DDX0051P-50	DDX0051P-100	Purified	110G10.01	IgG1	Binding to nitrocellulose-blotted Bet v 1, enhances human IgE binding to Bet v1, cross-competition with anti-Bet v1 mAbs
DDX0052P-50	DDX0052P-100	Purified	202B8.03	IgG1	Binding to nitrocellulose-blotted Bet v 1, enhances human IgE binding to Bet v1, cross-competition with anti-Bet v1 mAbs, Bet v1 immunopurification

*Other clones available on request*

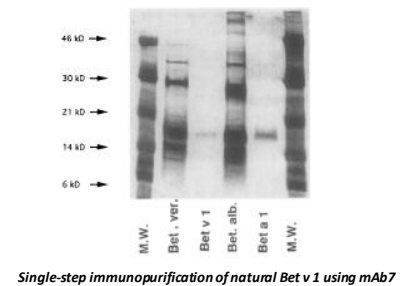
## Application tested : Bet v1 binding, modulation of IgE binding to Betv1, ELISA , Immunopurification of Bet v 1



Modulation of IgE (allergic patients) binding to Bet v 1

inhibitor	peroxydase-labeled mAb									
	mAb1	mAb10	mAb2	mAb11	mAb3	mAb4	mAb7	mAb8	mAb9	epitope
mAb1	100	95	82	60	67	-	98	96	84	
mAb10	96	100	100	60	72	-	-	32	30	A
mAb2	18	87	99	45	50	-	76	78	72	
mAb11	-	-	45	100	55	39	77	72	72	B
mAb3	-	-	-	-	92	0	56	59	74	C
mAb4	-	-	38	50	47	97	73	67	73	D
mAb7	-	-	-	-	-	-	97	-	26	E
mAb8	-	-	22	-	-	-	-	84	-	F
mAb9	-	-	-	-	20	-	-	-	93	G

Cross-competition of the anti-Bet v 1 mAbs (% binding inhibition)



Single-step immunopurification of natural Bet v 1 using mAb7

(*Lebecque et al, 1997*)

## Usage recommendation:

- \*This monoclonal antibody may be used between 5-20 µg/ml.
- \*Optimal dilution should be determined by each laboratory for each application.
- \*Coupled antibody: to maintain RT before use

## Aliquot storage conditions:

- 20°C. KEEP CONTENTS STERILE: no preservative.
- Purified antibodies:** avoid repeated freeze/thaw cycles.
- Coupled antibodies:** glycerol protects from freezing.

Not for use in Humans. For research purpose only