



Mouse Anti-Soybean Gly m 4 Monoclonal Antibody, clone 5B5 (CABT-YN1511)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Specificity	Binds to species specific epitope present on Glycine max allergen, Gly m 4.
Target	Soybean Gly m 4
Immunogen	Gly m 4
Isotype	IgG1, κ
Source/Host	Mouse
Species Reactivity	Glycine max
Clone	5B5
Purification	Produced in vitro and purified by affinity chromatography using Protein A.
Conjugate	Unconjugated
Applications	ELISA Recommended dilution: ELISA: 1:1000 Final working dilutions must be determined by end user.
Format	Liquid
Concentration	Lot specific
Size	100 µl
Buffer	Phosphate buffered saline, pH 7.4, preservative free.

Preservative	None
Storage	Store at 4°C
Ship	Wet ice

BACKGROUND

Introduction

Gly m 4 acts as the major soy allergen for patients allergic to birch pollen, accounting for pollen-related soybean allergy in adults. It is a pan-allergen, belonging to group 10 of pathogenesis-related proteins (PR-10) with a molecular weight of 17 kDa. Gly m 4 concentration varies widely among the different soybean products, depending strongly on the total quantity of soybean in the product, the extent of food processing, and heating. The differences in Gly m 4 content of different soy-containing products may account for the differences in symptom severity (mild to severe). Patients sensitized to Gly m 4 may present oral allergy syndrome (facial edema, itchy eyes, angioedema, nasal congestion, nasopharyngitis, painful swallowing or other buccal symptoms), gastrointestinal, or respiratory symptoms, and even anaphylaxis upon consumption of soy-containing products. The sensitization to Gly m 4 in birch-pollen allergic patients poses as a risk factor for the development of oral allergy syndrome (OAS) of severe type as well as systemic reactions to soy. Gly m 4 is cross-reactive with allergens of other legumes like Bet v 1 (Betulaceae pollen) as well as with other PR-10 proteins such as Aln g 1 (alder pollen), Ara h 8 (peanut), Cor a 1.01 (hazel pollen), Cor a 1.04 (hazelnut), Mal d 1 (apple), Pru p 1 (peach). Importantly, Gly m 4 has been recognized as a diagnostic marker for severe allergic reactions to soy in especially birch pollen allergic patients.

Keywords	Gly m4; Gly m 4; Glycine max
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GENE INFORMATION

Protein Refseq	None
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