

# P 61 Characterization of Hot Pepper $\alpha$ -Tubulin Isotype, *CaTua* III Using Peptide Monoclonal Antibody

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## Objectives

This study was carried out to analyze the function of *CaTua* III, which is one of three  $\alpha$ -tubulin isotypes in hot pepper (*Capsicum annuum* L.).

## Material and Methods

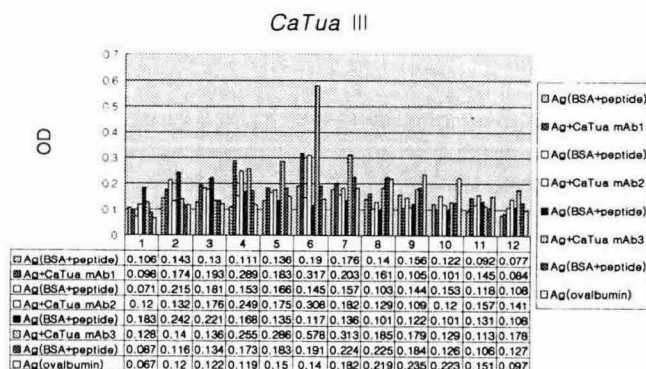
We synthesized peptide immunogen with BSA carrier in the specific region of *CaTua* III. Also, we produced monoclonal antibody and executed indirect ELISA with these hybridoma's secretion media. The reactivity of the mAb from purified cell

lines were assayed on western blots of extracts from recombinant baculovirus expressed in insect cell. The subcellular localization of the  $\alpha$ -tubulin isotype and reactivity of the antibodies against chemically fixed protein were analyzed.

## Results and Discussion

In the result of the indirect ELISA, the reactivity of the monoclonal antibodies against *CaTua* III with synthesized peptide immunogen is shown in the figure.

It is suggested that *CaTua* III has a role in ripening stage of the hot pepper such roles as ethylene, glucose, and sucrose from the northern analysis



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