

LATEX CROSS-REACTIVE FOOD PANELS

Test Code	Panel Name	Food-Specific IgE Tests Included	Specimen Requirement
402100	Latex Mini Food Panel	Avocado (<i>Persea americana</i>) Banana (<i>Musa spp.</i>) Kiwi (<i>Actinidia chinensis</i>) Hazelnut (<i>Corylus americana</i>)	1 mL Serum Ambient temp.
402101	Latex Related Food Panel	Avocado (<i>Persea americana</i>) Banana (<i>Musa spp.</i>) Kiwi (<i>Actinidia chinensis</i>) Celery (<i>Apium graveolens</i>) Cherry (<i>Prunus avium</i>) Chestnut (<i>Castanea sativa</i>)	Hazelnut (<i>Corylus americana</i>) Melons (<i>Cucubitaceae</i> family) Peach (<i>Prunus persica</i>) Potato (<i>Solanum tuberosum</i>) Tomato (<i>Lycopersicon esculentum</i>) 2 mL Serum Ambient temp.

CPT # : 86003 each

Method: FEIA (ImmunoCAP™ Specific IgE, a sensitive and specific fluorescence-based enzyme immunoassay system from Pharmacia Diagnostics)

Units Reported: kU/L (1 Unit = 2.4 ng of IgE)

Normal Range: < 0.35 kU/L

Introduction:

A number of recent reports have noted a clinical and immunochemical cross-reactivity between latex and several plant antigens, especially certain fruits and vegetables (1 - 4). The most common of these cross-reactions include banana, avocado and kiwi but the number of plant relationships continues to expand as investigators evaluate additional antigens. Members of the stone fruit family, Solanaceae family, and melon family have also been identified as having cross-reacting proteins. The source of cross-reactivity of these various unrelated foods is most likely due to the presence of proteins that serve identical biochemical/enzymatic functions in the various plants. The clinical significance of these cross-reactions is not clear. It is possible that patients allergic to these fruits may constitute a separate risk group for latex sensitivity but the appropriate studies have not been performed.

References :

- (1) Slater JE. Latex allergy. *J. Allergy Clin Immunol* 1994; 94:139-149.
- (2) Ross BD, McCullough J, Ownby DR. Partial cross-reactivity between latex and banana allergens. *J Allergy clin Immunol* 1992;90:409-410.
- (3) Charous, BL. Personal Communication.
- (4) Lavaud F, Prevcost A, Cossart C, et al. Allergy to latex , avocado, pear, and banana: Evidence for a 30kd antigen in immunoblotting. *J Allergy Clin Immunol* 1995; 95:557-64.

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