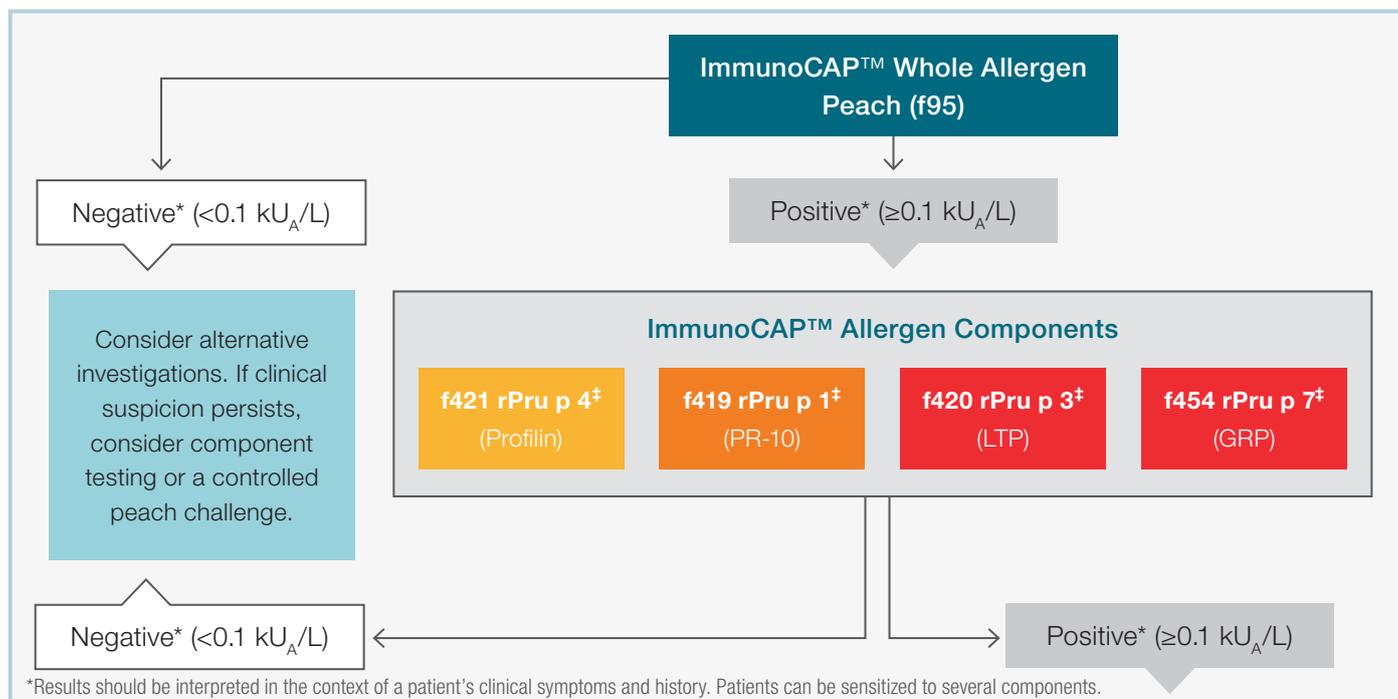


# ImmunoCAP Allergen Peach Test Algorithm

Look deeper with the help of ImmunoCAP Allergen Component tests



## Interpreting results

**Cross-reaction, rarely associated with clinical symptoms<sup>1,2,6</sup>**

**Pru p 4<sup>†</sup> (Profilin)**

Sensitization frequently via grass pollen. May cause reactions, even severe, in a minority of patients.

**Management considerations**

- Consider further investigations to identify the primary allergen.

**Risk of local and in rare cases systemic reactions<sup>1,2,6</sup>**

**Pru p 1<sup>†</sup> (PR-10)**

Indication of cross-reactivity to PR-10-containing pollens and plant foods.

**Management considerations**

- In regions where birch is common, consider testing with Bet v 1<sup>†</sup> (PR-10; t215) to confirm primary birch sensitization.

**Risk of severe, systemic symptoms<sup>1-6</sup>**

**Pru p 7<sup>†</sup> (GRP) & Pru p 3<sup>†</sup> (LTP)**

Primary sensitization by Cypress pollen possible in Pru p 7 positive patients.<sup>2,4</sup> Sensitization to five or more LTPs increase the risk of severe reactions in Pru p 3 positive patients.<sup>5</sup>

**Management considerations**

- Consider testing with Cypress Whole Allergen<sup>†</sup> (t23, t222) to confirm cypress sensitization if Pru p 7 is positive.
- Consider testing for other LTPs if Pru p 3 is positive.

<sup>†</sup>**Product list:** ImmunoCAP Allergen f95, Peach; ImmunoCAP Allergen f419, Allergen component rPru p 1 PR-10, Peach; ImmunoCAP Allergen f420, Allergen component rPru p 3 LTP, Peach; ImmunoCAP Allergen f421, Allergen component rPru p 4 Profilin, Peach; ImmunoCAP Allergen f454, Allergen component rPru p 7 Peach; ImmunoCAP Allergen t215, Allergen component rBet v 1 PR-10, Birch; ImmunoCAP Allergen t23, Italian/Mediterranean/Funeral cypress; ImmunoCAP Allergen t222, Arizona cypress.

**References:** 1. Matricardi PM, et al. EAACI Molecular Allergology User's Guide. Pediatric allergy and immunology: official publication of the European Society of Pediatric Allergy and Immunology. 2016;27 Suppl 23:1-250. 2. Kleine-Tebbe J and Jakob T Editors: Molecular Allergy Diagnostics. Innovation for a Better Patient Management. Springer International Publishing Switzerland 2017. ISBN 978-3-319-42498-9 ISBN 978-3-319-42499-6 (eBook), DOI 10.1007/978-3-319-42499-6. 3. Ehrenberg, A.E., et al., Characterization of a 7 kDa pollen allergen belonging to the gibberellin-regulated protein family from three Cupressaceae species. Clin Exp Allergy, 2020. 4. Klingebiel, C., et al. (2019). "Pru p 7 sensitization is a predominant cause of severe, cypress pollen-associated peach allergy." Clin Exp Allergy 49(4): 526-536. 5. Scala E et al. Lipid transfer protein sensitization: reactivity profiles and clinical risk assessment in an Italian cohort. Allergy 70 (2015) 933-943. 6. Mills C, et al. Plant Food Allergens: John Wiley and Sons Ltd., 2004.



## How ImmunoCAP Peach Allergen Components can help assess the risk of severe reactions

Introducing ImmunoCAP Allergen f454, Allergen Component rPru p 7 Peach

### ImmunoCAP Allergen Components – Severity of reaction

**f421 rPru p 4\***  
(Profilin)

Local reactions

**f419 rPru p 1\***  
(PR-10)

Local reactions

**f420 rPru p 3\***  
(LTP)

Local & systemic reactions

**f454 rPru p 7\***  
(GRP)

Systemic reactions

#### **f421 rPru p 4\* (Profilin)<sup>1,2,6</sup>**

- Seldom associated with clinical symptoms. May cause local and even severe reactions in a minority of patients.
- Profilins are sensitive to heat and digestion. Cooked foods are often tolerated.
- Present in all pollens and plant foods, associated with cross-reactions, typically to birch and grass pollen.
- Marker for sensitization to Profilins.

#### **f419 rPru p 1\* (PR-10, Bet v 1 homologue)<sup>1,2,6</sup>**

- Frequently associated with local symptoms as oral allergy syndrome. Rarely, in conjunction with co-factors, associated with severe reactions.
- Cross reaction marker between peach and birch pollen.
- Most PR-10 proteins are sensitive to heat and digestion and cooked foods are often tolerated.
- Marker for sensitization to PR-10 proteins in fruits, vegetables and pollen.

#### **f454 rPru p 7\* (Gibberillin-regulating Protein)<sup>1-4</sup>**

- Marker for severe fruit-induced allergy.
- Cross reaction marker between peach and cypress pollen.
- Found in peel and pulp. Stable to heat and digestion, likely also causing reactions to cooked peaches.
- Marker for sensitization to GRPs in fruits and cypress pollen.

#### **f420 rPru p 3\* (Lipid Transfer Protein)<sup>1,2,5,6</sup>**

- Frequently associated to severe reactions as well as oral allergy syndrome.
- High concentration in the peel. LTPs are stable to heat and digestion causing reactions also to cooked peaches.
- Associated with allergic reactions to fruit and vegetables especially in regions where peaches and similar fruits are cultivated.
- Marker for sensitization to LTPs in fruits.

\*Full product names are available on the opposite side

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