

Pollen allergy

Suggested test profile for tree, grass and weed pollen sensitisations

ImmunoCAP™ Whole Allergens

Confirm or exclude the suspected allergy with the relevant tree, grass and weed pollen¹⁻⁴

Allergen sources

Tree pollen



Birch	t3
Ash /Olive	t25 / t9
Cypress / mountain juniper	t23 / t6
Plane tree	t11

Grass pollen



Timothy grass	g6
Bermuda grass	g2

Weed pollen



Mugwort	w6
Ragweed	w1
Wall pellitory	w21
Plantain	w9
Saltwort	w11

ImmunoCAP™ Allergen Components

Differentiate between primary sensitisation and cross-reactivity^{1-3,5-8}

Primary sensitisers

Bet v 1	t215
Ole e 1	t224
Cup a 1**	t226
Pla a 1	t241

Phl p 1	g205
Phl p 5b	g215
Phl p 1/Phl p 5b	g213
Cyn d 1**	g216

Art v 1	w231
Amb a 1	w230
Par j 2	w211
Pla l 1	w234
Sal k 1**	w232

Cross-reactive allergens

Bet v 2*	t216
Bet v 4*	t220
rBet v 2/Bet v 4*	t221
MUXF3 CCD**	o214

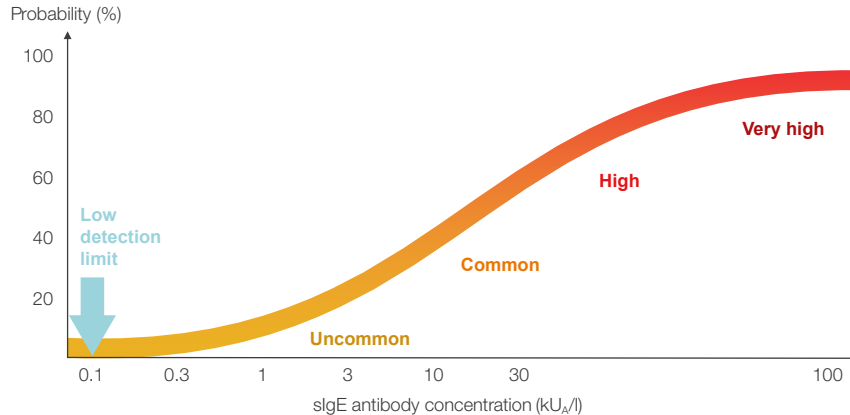
Phl p 7*	g210
Phl p 12*	g212
Phl p 7/Phl p 12	g214
MUXF3 CCD**	o214

If clinical symptoms are present with exposure to tree/grass and weed pollen, there's a high probability of clinical allergy. Consider pollen exposure reduction and prescription of allergen immunotherapy (AIT).^{1-3,5-9}

Unclear AIT efficiency, especially if no pollen-specific sensitisation is found. Continue searching for the primary sensitiser.^{1-3,8,9}

* Birch or timothy profilins (Bet v 2, Phl p 12) and polcalcins (Bet v 4, Phl p 7) can replace the corresponding components in other pollen due to the strong structural similarity.^{2,7,8} ** Glycoproteins contain cross-reactive carbohydrate determinants (CCD). IgE antibodies only against CCD (such as on MUXF3) are usually not clinically relevant.^{6,7}

ImmunoCAP Specific IgE tests: quantitative test results you can trust, enabled through high-quality standards



Positive test results

≥ 0.10 kU_A/l indicates sensitisation, especially in, but not limited to, young children. Even very low values indicate a risk of allergy symptoms.^{13,14}

Factors to consider for a final diagnosis⁴⁻¹⁷

- Age
- Degree of atopy
- Allergen load
- Type of sensitising allergens
- Previous symptoms
- Family medical history



Why use ImmunoCAP™ Specific IgE tests?^{15,16}

- ✓ Can be used in any patient, irrespective of medication, condition or season
- ✓ No risk of adverse reaction (anaphylaxis)
- ✓ Quantitative blood test

Clinical value of quantitative ImmunoCAP Specific IgE testing

Diagnosis



Quantitative measurement of allergen specific IgE antibodies, using the ImmunoCAP Specific IgE assay provides an indication of the risk for clinical reactions to an allergen and assists in the identification of offending allergens for avoidance measures.¹⁹

Prognosis



In general, the higher the IgE antibody level, the higher the risk of developing allergies. Since early sensitisation can be predictive of future allergies development, it's crucial to have highly sensitive and specific IgE tests, allowing accurate identification of sensitising allergens already in young children.^{20,21}

Follow-up



Specific IgE blood testing results help follow the changes in the patient's allergic status over time.^{18,19}

References: 1. Barber D, et al. *Allergy* 2021;00:1-17. 2. Kleine-Tebbe J, et al. *Allergol Select* 2021;5:180-186. 3. Kleine-Tebbe J, et al. *Immunol Allergy Clin N Am* 2016;36:191-203. 4. Scadding GK, et al. *Immunol Allergy Clin North Am* 2016;36(2):249-260. 5. Ansotegui I J, et al. *World Allergy Organization Journal* 2020;13:100091. 6. Dramburg S, et al. *Pediatr Allergy Immunol* 2023;34(Suppl 28):e13854. 7. Kleine-Tebbe J, et al. *Molecular Allergy Diagnostics Springer International Publishing Switzerland* 2017. 8. Pfaar O, et al. *Allergol Select* 2022;6:167-232. 9. Schmid-Grendelmeier P. *Der Hautarzt* 2010;61(11):946-953. 10. Sampson H A. *J Allergy Clin Immunol* 2001;107(5):891-896. 11. Shek L P, et al. *J Allergy Clin Immunol* 2004;114(2):387-391. 12. Söderström L, et al. *Allergy* 2003;58(9):921-928. 13. Thorpe M, et al. *J Allergy Clin Immunol Pract* 2023. 14. Van Hage M, et al. *J Allergy Clin Immunol* 2017;140(4):974-977. 15. Ciprandi C, et al. *Ann Allergy Asthma Immunol* 2014;112(2):184e185. 16. Siles R I, et al. *Cleve Clin J Med* 2011;78(9):585-592. 17. Walsh J, et al. *The British journal of general practice: the journal of the Royal College of General Practitioners* 2011;61(588):473-475. 18. Worm M, et al. *Allergologie select* 2021;5:195-243. 19. Hamilton RG, et al. *J Allergy Clin Immunol* 2010;126(1):33-8. 20. Yunginger JW, et al. *J Allergy Clin Immunol* 2000;105(6pt1):1077-1084. 21. Boyce J, et al. *Journal of the American Dietetic Association* 2011.

Official product names: ImmunoCAP Allergen t3, Common silver birch; ImmunoCAP Allergen t215, Allergen component rBet v 1, PR-10, Birch; ImmunoCAP Allergen t9, Olive; ImmunoCAP Allergen t224, Allergen component rOle e 1, Olive; ImmunoCAP Allergen t23, Cypress; ImmunoCAP Allergen t226, Allergen component nCup a 1, Cypress; ImmunoCAP Allergen t11, London plane tree; ImmunoCAP Allergen t241, Allergen component rPla a 1, London plane tree; ImmunoCAP Allergen g6, Timothy; ImmunoCAP Allergen g205, Allergen component rPhl p 1, Timothy; ImmunoCAP Allergen g215, Allergen component rPhl p 5b, Timothy; ImmunoCAP Allergen g2, Bermuda grass; ImmunoCAP Allergen g216, Allergen component nCyn d 1, Bermuda grass; ImmunoCAP Allergen w6, Mugwort; ImmunoCAP Allergen w231, Allergen component nArt v 1, Mugwort; ImmunoCAP Allergen w1, Ragweed; ImmunoCAP Allergen w230, Allergen component nAmb a 1, Ragweed; ImmunoCAP Allergen w21, Wall pellitory; ImmunoCAP Allergen w211, Allergen component rPar j 2, LTP, Wall pellitory; ImmunoCAP Allergen w9, Plantain; ImmunoCAP Allergen w234, Allergen component rPla l 1, Plantain; ImmunoCAP Allergen w11, Saltwort; ImmunoCAP Allergen w232, Allergen component nSal k 1, Saltwort; ImmunoCAP Allergen o214, Allergen component MUXF3 CCD, Bromelain; ImmunoCAP Allergen g213, Allergen component rPhl p 1, rPhl p 5b Timothy; ImmunoCAP Allergen g210, Allergen component rPhl p 7 Timothy; ImmunoCAP Allergen g212, Allergen component rPhl p 12 Profilin; ImmunoCAP Allergen g214, Allergen component rPhl p 7, rPhl p 12; ImmunoCAP Allergen t216, Allergen component rBet v 2 Profilin; ImmunoCAP Allergen t220, Allergen component rBet v 4 Birch; ImmunoCAP Allergen t221, Allergen component rBet v 2, rBet v 4 Birch; ImmunoCAP Allergen t25, European Ash; ImmunoCAP Allergen t6, Mountain juniper

 Learn more at thermofisher.com/allergencomponents

© 2025 Thermo Fisher Scientific Inc. All rights reserved. All trademarks are the property of Thermo Fisher Scientific and its subsidiaries unless otherwise specified. Legal manufacturer: Phadia AB (a part of Thermo Fisher Scientific). 453351.AL.EU7.EN.V1.25