

Alternaria alternata

ImmunoCAP™ Specific IgE tests

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Alternaria is a genus of worldwide fungi found in different habitats such as soil, the atmosphere, plants or indoor environments. *Alternaria alternata* is considered one of the most important sources of fungal allergens worldwide and it is associated with severe asthma and respiratory status.¹ Cross-reactivity is linked to the homology between allergens found in *A. alternata* and other allergenic molds, mainly *Cladosporium*, *Penicillium*, and *Aspergillus*. Less frequent cross-reactivity has been reported with foods, like mushrooms and spinach.²

ImmunoCAP™
Whole Allergen

Alternaria alternata (m6)

ImmunoCAP™
Allergen Components

Alt a 1 (m229) – Acid glycoprotein



Primary sensitiser










- Major allergen and marker of genuine sensitization to *Alternaria alternata*²
- Main trigger of respiratory allergy in patients affected by fungal allergy³
- A vast majority (80–100%) of *Alternaria* sensitised patients have specific IgE to Alt a 1⁴
- Indicator for allergen immunotherapy (AIT) suitability^{3, 5}

Cross-reactive allergen

Alt a 6 (m230)* – Enolase

- Minor allergen
- Alt a 6 sensitization may be associated with cross-reactivity among members of different phyla like food, grass pollen and latex allergens^{1, 6}

* Available only on ImmunoCAP ISAC_{E112a} test.

Whole extract <i>Alternaria alternata</i>	Primary sensitiser Alt a 1	Cross-reactive allergen Alt a 6*	Interpreting results*	Management considerations
			<ul style="list-style-type: none"> Primary allergy to <i>Alternaria alternata</i> is probable² Risk marker for severe asthma³ 	<ul style="list-style-type: none"> Consider prescription AIT³ <i>Alternaria alternata</i> exposure reduction³ Clinical cross-reactivity can occur without molecular homology, as reported for <i>A. alternata</i> and kiwifruit. Alt a 1 interacts with the thaumatin-like protein (PR-5) Act d 2 present in the pulp of kiwifruit and may be responsible for reactions to <i>A. alternata</i> caused by kiwifruit ingestion.⁷
			<ul style="list-style-type: none"> Marker of cross-reactivity with other fungal allergenic enolases⁵ 	<ul style="list-style-type: none"> The prescription of AIT is contraindicated in patients monosensitised to Alt a 6.⁹
			If all components in the algorithm are negative and m6 is positive, the patient might be sensitised to an untested allergen. As such, in the context of clinical history, exposure reduction may still be recommended. ⁹	

* Results should always be interpreted in the context of the clinical history. * Available only on ImmunoCAP ISAC_{E112} test

References: **1.** Sánchez P, et al. Journal of Fungi 9 2022;8(3):277. **2.** Gabriel MF, et al. Environ Int 2016;89-90:71-80. **3.** Rick EM, et al. J Investig Allergol Clin Immunol 2016;26(6):344-354. **4.** Twaroch TE, et al. Clin Exp Allergy 2012;42(6):966-975. **5.** Liu J, et al. Front Immunol 2021. **6.** Čelakovska J, et al. Food and Agricultural Immunology 2019;30(1):1097-1111. **7.** Gomez-Casado C, et al. FEBS Letters 2014;588(9):1501-1508. **8.** Moreno A, et al. Allergy Asthma Immunol Res 2016;8(5):428-437. **9.** Dramburg S, et al. Pediatr Allergy Immunol 2023;34(Suppl 28):e13854.

Official product names: ImmunoCAP Allergen m6, *Alternaria alternata*; ImmunoCAP Allergen m229, Allergen component rAlt a 1, *Alternaria alternata*

 Learn more at thermofisher.com/allergencomponents

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