

Aspergillus fumigatus

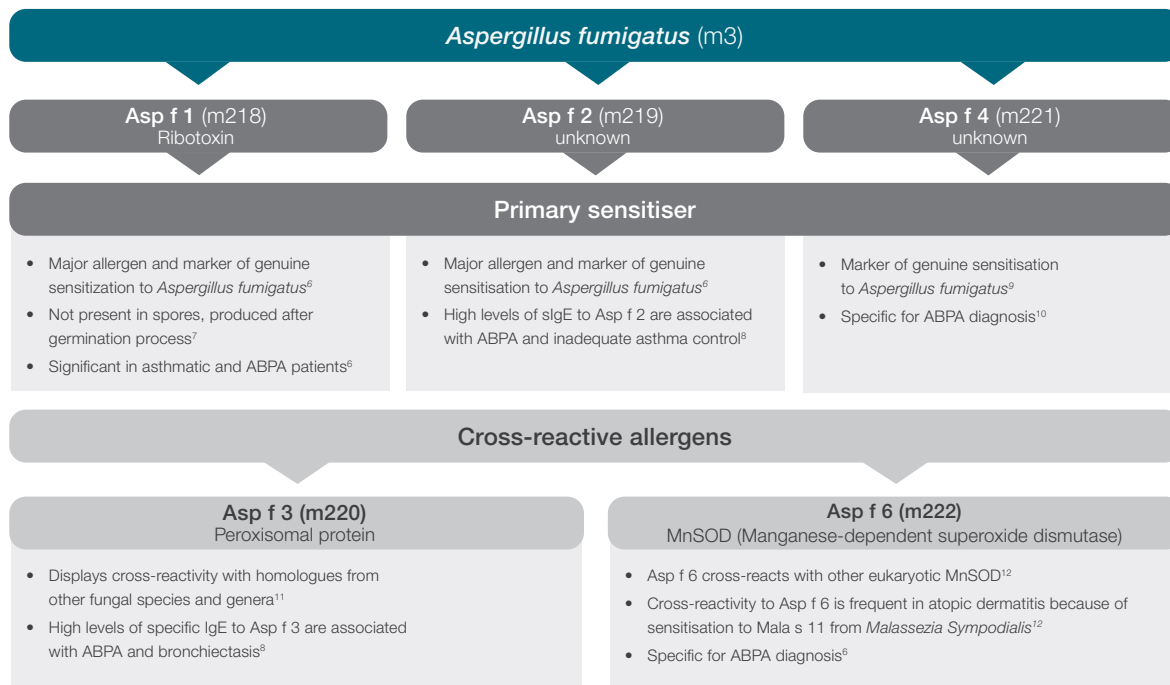
ImmunoCAP™ Specific IgE tests










ThermoFisher
SCIENTIFIC

Aspergillus fumigatus is a saprotroph and opportunistic filamentous fungus widely distributed all over the world and is the causal agent of allergic and infectious diseases affecting dozens of millions of people globally.¹⁻³ **Allergic bronchopulmonary aspergillosis (ABPA)** is the most severe *Aspergillus*-related allergic disease, affecting 1-2.5% of asthmatic patients and up to 10% of cystic fibrosis patients during their lifetime.⁴ Other significant allergic *Aspergillus*-related diseases are **allergic fungal rhinosinusitis (AFRS)** and **severe asthma with fungal sensitisation (SAFS)**.⁵

ImmunoCAP™
Whole Allergen

ImmunoCAP™
Allergen Components



Whole extract <i>Aspergillus fumigatus</i>	Primary sensitisers Asp f 1 / Asp f 2 / Asp f 4	Cross-reactive allergens Asp f 3 / Asp f 6	Interpreting results*	Management considerations
			<ul style="list-style-type: none"> Primary allergy to <i>Aspergillus fumigatus</i>^{6,9} 	<ul style="list-style-type: none"> Genuine sensitisation to <i>Aspergillus fumigatus</i>^{6,9} <i>Aspergillus fumigatus</i> exposure reduction
			<ul style="list-style-type: none"> Cross sensitisation from other mould species is likely^{11,12} 	<ul style="list-style-type: none"> Consider further investigations to identify the primary sensitizer¹¹⁻¹³
			If all components in the algorithm are negative and m3 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. ¹⁵	

* Results should always be interpreted in the context of the clinical history.

Allergic and infectious diseases caused by *Aspergillus fumigatus*

- Aspergillus-related allergic** (type I hypersensitivity, IgE): Diseases mainly affect asthmatic and cystic patients, although rhino-sinusal forms may develop in otherwise nonaffected subjects
- Hypersensitivity pneumonitis** (type III hypersensitivity, IgG): Disease that may develop in the context of occupational exposure, for example in farmers and in rural, malt, or stucco workers
- Allergic bronchopulmonary aspergillosis (ABPA)**: Most severe *Aspergillus*-related allergic disease, affecting 1-2.5% of asthmatic patients and up to 10% of cystic fibrosis patients during their lifetime⁴
- Allergic fungal rhinosinusitis (AFRS)** and **severe asthma with fungal sensitisation (SAFS)**: AFRS is a unique form of immune-mediated non-invasive fungal rhinosinusitis; SAFS is another phenotype of severe asthma associated with fungal sensitization in adults having overlapping characteristics with ABPA⁵



References: 1. Dellièri S, et al. Mycopathologia 2023;188, 603–621. 2. Bongomin F, et al. Journal of fungi 2017;3(4):57. 3. Rhodes JC. 2006;44(Suppl 1):S77-81. 4. Patel G, et al. Allergy and Asthma Proceedings 2019;40(6):421-424. 5. Wiesmuller GA, et al. Allergo J Int 2017;26(5):168-193. 6. Carsin A, et al. Allergy 2017;72(11):1632-1642. 7. De Linares C, et al. J. Fungi 2023. 8. Muthu V, et al. Clin Exp Allergy 2018. 9. Fukutomi Y, et al. Official journal of the Japanese Society of Allergology 2016. 10. Luo W, et al. J Clin Lab Anal 2020. 11. Hillmann F, et al. Sci Rep 2016. 12. Cramer, R. Clin Exp Allergy 2012. 13. Bowyer P, et al. Medical Mycology 2006. 14. Patterson TF, et al. Clinical Infectious Diseases 2016. 15. Dramburg S, et al. Pediatr Allergy Immunol 2023;34(Suppl 28):e13854.

Official product names: ImmunoCAP Allergen m3, *Aspergillus fumigatus*; ImmunoCAP Allergen m218, Allergen component rAsp f 1 *Aspergillus fumigatus*; ImmunoCAP Allergen m219, Allergen component rAsp f 2 *Aspergillus fumigatus*; ImmunoCAP Allergen m220, Allergen component rAsp f 3 *Aspergillus fumigatus*; ImmunoCAP Allergen m221, Allergen component rAsp f 4 *Aspergillus fumigatus*; ImmunoCAP Allergen m222, Allergen component rAsp f 6 *Aspergillus fumigatus*

 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