

Allergy Testing

RECOMBINANT ANTIGENS FOR THE DEVELOPMENT OF ALLERGEN-SPECIFIC IgE ANTIBODY TESTS



Recombinant allergens provide new opportunities for the diagnosis of IgE-mediated allergies.



Recombinant antigens are used increasingly over native allergen extracts in the diagnosis of allergies. They are capable of binding IgE antibodies in a comparable way to natural allergens and they demonstrate good reactivity in *in-vitro* diagnostic tests.

They offer several advantages including:

Lot-to-lot consistency: Recombinant antigens contain a defined amount of specific protein whereas allergen extracts are prone to high variability between lots in terms of the allergens present in the mix and ratio of each allergen

Defined purity: Native allergen extracts contain non-allergenic compounds and can contain contaminants from other allergen sources leading to false-positive results

Increased reproducibility: Assays based on recombinant allergens allow for the precise analysis of reactivity profiles of allergenic patients

Meridian's new panel of recombinant allergens is ideally suited to developing quantitative allergy tests which can determine an individual's specific IgE-profile. These antigens are highly sensitive and specific in contrast to native allergen extracts which when used in diagnostic assays, are not able to distinguish different antibody specificities to components within that extract.



Product List

All products are suitable for use in ELISA.

Indoor Allergens:

Unlike seasonal allergies such as hay fever, indoor allergies may last all year long however, they tend to be at their worst in the late summer, when dust mites are at their peak. Sensitivity to indoor allergens is very common and occurs at every age. Typical indoor allergens include dust mites, pet dander, molds and cockroaches.

Description	Source	Molecular Weight	Product Code
Animal Epithelial Recombinant Allergens:			
Cat allergen (<i>Fel d 1</i>)	<i>P. pastoris</i>	22kDa	R01747A
Dog allergen (<i>Can f 5</i>)	<i>P. pastoris</i>	30kDa	R01748A
Dog allergen (<i>Can f 1</i>)	<i>E. coli</i>	25 kDa	R01750A
Horse allergen (<i>Equ c 1</i>)	<i>E. coli</i>	27kDa	R01749A
Dust Mite Recombinant Allergens:			
Dust Mite (<i>Der p 10</i>)	<i>E. coli</i>	39kDa	R01751A
Dust Mite (<i>Der f 2</i>)	<i>P. pastoris</i>	17kDa	R01752A

Outdoor Allergens:

Outdoor allergens are seasonal and are more common during the spring and summer and tend to be worse in warm, dry, and windy weather. The most common sources of outdoor allergens include wind-pollinated plants such as grasses, trees, weeds and molds. The pollens from insect-pollinated plants are too heavy to remain airborne for long, and they are less likely to trigger an allergic reaction such as hay fever.

Description	Source	Molecular Weight	Product Code
<i>A. alternata</i> (<i>Alt a 1</i>)	<i>E. coli</i>	23kDa	R01753A
Timothy Grass (<i>Phl p 1</i>)	<i>E. coli</i>	33kDa	R01754A
Timothy Grass (<i>Phl p 5a</i>)	<i>E. coli</i>	35kDa	R01755A
Timothy Grass (<i>Phl p 5b</i>)	<i>E. coli</i>	33kDa	R01756A
Timothy Grass (<i>Phl p 7</i>)	<i>E. coli</i>	15kDa	R01757A
Timothy Grass (<i>Phl p 12</i>)	<i>E. coli</i>	21kDa	R01758A
Plane Tree (<i>Pla a 1</i>)	<i>P. pastoris</i>	21kDa	R01759A
Plane Tree (<i>Pla a 3</i>)	<i>E. coli</i>	16kDa	R01760A
Mugwort (<i>Art v 1</i>)	<i>P. pastoris</i>	13kDa	R01761A
Mugwort (<i>Art v 3</i>)	<i>E. coli</i>	16kDa	R01762A