

Welcome to the era of  
**MOLECULAR ALLERGY** for animals!



# PAX

pet allergy xplorer



First quantitative macroarray  
IgE test specifically designed  
for animals

Over 200 allergen extracts  
and molecular components

Better identification of allergen  
cross-reactivities

Fully automated process, higher  
level of standardisation

With CCD blocking and  
2 blocking efficiency  
detectors



# Molecular Allergology: The future of IgE sensitisation detection



Molecular allergology is a state-of-the-art approach to the detection of sensitisations, whereby defined single allergen components are used for the determination of specific IgE in place of traditionally-used allergen extracts. The molecular components are recombinant proteins that provide a higher level of standardisation than allergen extracts and enable a more precise identification of IgE sensitisations. Molecular allergology tests are powerful tools that help pinpoint allergy triggers, thus facilitating risk assessment and therapy decisions.

Nextmune is bringing you the first molecular allergology platform for animals, the next-generation in allergen IgE serology:  
PAX - Pet Allergy Explorer

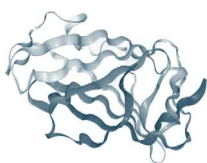


## What are the main advantages of PAX?

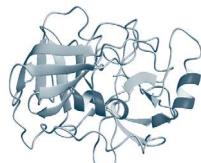
- First quantitative multiplex macroarray specifically designed for companion animals
- Over 200 allergen extracts and components included = lower testing cost per allergen
- Fully automated process = higher level of standardization (same result if tested multiple times)
- With CCD blocking and 2 blocking efficiency detectors
- Only 0.5 ml of serum needed per test
- Expected increase in serological test sensitivity due to a higher concentration of molecular allergens
- Identification of "primary" sensitizing allergens
- Identification of allergen cross-reactivities
- Selection of relevant allergens for specific immunotherapy



Allergen extract



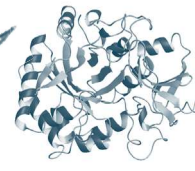
**Der f 2**  
NPC2 family



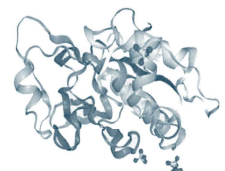
**Der f 3**  
trypsin



**Der f 10**  
tropomyosin



**Der f 15**  
chitinase



**Der f 1**  
cysteine protease

# The PAX results are clearly set out, easy to interpret and include the following information:

- Summary of detectable sensitizations
- Interpretation summary and treatment recommendation
- Detailed results per extract and components
- Detailed interpretation with Information about allergenicity and relevance, time of the year, possible cross-reactivities and treatment indication for each allergen

## PAX Complete result

The screenshots show the following sections of the PAX Complete result:

- Environmental:** A summary of detectable sensitizations categorized by type (Grass Pollen, Weed Pollen, Tree Pollen, Fungi, Mites & Cockroaches, Insects & Venoms) and allergen class (Grasses & Spores, Pollen, Moulds & Yeast, etc.).
- Summary and immunotherapy recommendation:** A section providing a summary of the patient's sensitization profile and offering specific immunotherapy recommendations based on the results.
- ENVIRONMENTAL PANEL:** A detailed table listing individual allergens, their components, and the corresponding test results (e.g., Positive, Negative, or Not Determined).
- Interpretation - Support:** A section providing detailed clinical interpretation, including allergenicity and relevance information, seasonal prevalence, and treatment indications for the identified allergens.

## PAX Screening result

The PAX Screening result interface includes:

- Screening Environmental:** A section for allergen extracts and components, with a clear result status (e.g., POSITIVE).
- Instructions:** Clear guidance on how to perform the screening test, including the need to use fresh urine samples.
- PAX EXPAND:** A section for providing patient information and a 'SEND' button to submit the results.
- 100% Reliability:** A badge indicating the high accuracy of the screening test.



- Guaranteed 100% reliable screening test
- Fast results
- Continuous support and advice with our vet allergy experts



# PAX Allergens: Components & Extracts

	Common name	Scientific name	Extracts & Components	
Grass Pollens	Bermuda grass	<i>Cynodon dactylon</i>	Cyn d * rCyn d 1	
	Orchard grass	<i>Dactylis glomerata</i>	Dac g *	
	Meadow fescue	<i>Festuca pratensis</i>	Fes p *	
	Perennial ryegrass	<i>Lolium perenne</i>	rLol p 1	
	Timothy		<i>Phleum pratense</i>	rPhl p 1
				rPhl p 2
				rPhl p 5.0101
				rPhl p 6
				rPhl p 7
	Kentucky blue grass	<i>Poa pratensis</i>	Poa p *	
Ryegrass, cultivated	<i>Secale cereale</i>	Sec c_pollen *		
Tree Pollens	Alder	<i>Alnus glutinosa</i>	Aln g *	
			rAln g 1	
			rAln g 4	
	Silver birch	<i>Betula verrucosa</i>	Bet v *	
			rBet v 1	
			rBet v 2	
			rBet v 6	
	Hazel	<i>Corylus avellana</i>	Cor a_pollen * rCor a 1.0103	
	Cypress	<i>Cupressus sempervirens</i>	Cup s *	
	Beech	<i>Fagus sylvatica</i>	rFag s 1	
	Ash	<i>Fraxinus excelsior</i>	Fra e * rFra e 1	
	Privet	<i>Ligustrum vulgare</i>	Lig v *	
	Olive tree	<i>Olea Europaea</i>	Ole e *	
			nOle e 1	
			rOle e 7	
London plane tree	<i>Platanus acerifolia</i>	rPla a 1		
		nPla a 2		
		rPla a 3		
Cottonwood	<i>Populus nigra</i>	Pop n *		
Elm	<i>Ulmus campestris</i>	Ulm c *		
Weed Pollens	Ragweed	<i>Ambrosia artemisiifolia</i>	Amb a *	
			rAmb a 1	
			rAmb a 4	
	Mugwort	<i>Artemisia vulgaris</i>	Art v *	
			rArt v 1.0101	
			rArt v 3.0201	
	Lamb's quarter	<i>Chenopodium album</i>	Che a * rChe a 1	
	Wall pellitory	<i>Parietaria judaica</i>	Par j * rPar j 2	
	Ribwort / Plantain	<i>Plantago lanceolata</i>	Pla l * rPla l 1	
	Dock/Sorrel	<i>Rumex crispus / acetosella</i>	Rum c / * Rum a	
	Russian thistle	<i>Salsola kali</i>	Sal k * rSal k 1	
	Nettle	<i>Urtica dioica</i>	Urt d *	

	Common name	Scientific name	Extracts & Components
Danders & Epithelia	Cattle	<i>Bos domesticus</i>	rBos d 2
	Dog	<i>Canis familiaris</i>	rCan f 1
			rCan f 2
			nCan f 3
			rCan f 4
			rCan f 6
			Can f_maleurine (including Can f 5) *
	Guinea pig	<i>Cavia porcellus</i>	rCav p 1
	Horse	<i>Equus caballus</i>	rEqu c 1
			nEqu c 3
			rEqu c 4
	Cat	<i>Felis domesticu</i>	rFel d 1
nFel d 2			
rFel d 4			
rFel d 7			
Mouse	<i>Mus musculus</i>	rMus m 1	
Rabbit	<i>Oryctolagus cuniculus</i>	rOry c 1 rOry c 2 rOry c 3	
Mites & Cockroaches	Acarus siro	<i>Acarus siro</i>	Aca s *
	German cockroach	<i>Blattella germanica</i>	rBla g 1
			rBla g 2
			rBla g 4
			rBla g 5
	Flea	<i>Ctenocephalides felis</i>	rBla g 9
			Cte f 1
	Dermatophagoides farinae	<i>Dermatophagoides farinae</i>	Der f *
			rDer f 1
			rDer f 2
			rDer f 15
			rDer f 18
			rDer f 18
	Dermatophagoides pteronyssinus	<i>Dermatophagoides pteronyssinus</i>	Der p *
			rDer p 1
			rDer p 2
			rDer p 5
			rDer p 7
rDer p 10			
rDer p 11			
rDer p 20			
rDer p 21			
rDer p 23			
Glycyphagus domesticus	<i>Glycyphagus domesticus</i>	rGly d 2	
Lepidoglyphus destructor	<i>Lepidoglyphus destructor</i>	Lep d *	
		rLep d 2	
Tyrophagus putrescentiae	<i>Tyrophagus putrescentiae</i>	Tyr p *	
		rTyr p 2	
Alternaria alternata	<i>Alternaria alternata</i>	Alt a *	
		rAlt a 1 rAlt a 6	

	Common name	Scientific name	Extracts & Components
Moulds & Yeasts	Aspergillus fumigatus	<i>Aspergillus fumigatus</i>	Asp f *
			rAsp f 1
			rAsp f 3
			rAsp f 4
	Cladosporium herbarum	<i>Cladosporium herbarum</i>	rAsp f 6 Cla h * rCla h 8
	Malassezia pachydermatis	<i>Malassezia pachydermatis</i>	Mala p *
Malassezia sympodialis	<i>Malassezia sympodialis</i>	rMala s 1	
		rMala s 9	
		rMala s 5	
		rMala s 6	
		rMala s 11	
Insect Venoms	Honey bee venom	<i>Apis mellifera</i>	Api m *
			nApi m 1
			Api m 2
			Api m 3
	Long-headed wasp venom	<i>Dolichovespula spp.</i>	Api m 5 rApi m 10 Dol spp *
	Paper wasp venom	<i>Polistes dominulus</i>	Pol d * rPol d 5
Fire ant venom	<i>Solenopsis richteri &amp; Solenopsis invicta</i>	Sol spp *	
		Ves v *	
Common wasp venom	<i>Vespula vulgaris</i>	rVes v 1	
		rVes v 5	
Foods	Oat	<i>Avena sativa</i>	Ave s *
	Buckwheat	<i>Fagopyrum esculentum</i>	Fag e *
			nFag e 2
	Sunflower seed	<i>Helianthus annuus</i>	Hel a *
	Barley	<i>Hordeum vulgare</i>	Hor v *
	Rice	<i>Oryza sativa</i>	Ory s Ory s_GLUB1
	Millet	<i>Panicum miliaceum</i>	Pan m *
	Rye, cultivated	<i>Secale cereale</i>	Sec c_flour * Tri a *
	Wheat	<i>Triticum aestivum</i>	rTri a 14
			rTri a 19
			nTri a aA_TI
	Corn, cereal	<i>Zea mays</i>	Zea m *
rZea m 14 Zea m_GBSSI			
Apple	<i>Malus domestica</i>	rMal d 1	
		nMal d 2	
		rMal d 3	
Peanut	<i>Arachis hypogaea</i>	nAra h 1	
		rAra h 2	
		nAra h 3	
		rAra h 5	
		rAra h 6	
		rAra h 8 rAra h 9 rAra h 15	

\* Extract

	Common name	Scientific name	Extracts & Components
<b>Foods</b>	Soy	<i>Glycine max</i>	Gly m *
			rGly m 4
			rGly m 5
			nGly m 6
			nGly m 8
	Lentil	<i>Lens culinaris</i>	Len c *
			Len c 1
			Len c 2
			Len c 3
	Pea	<i>Pisum sativum</i>	Pis s *
			Pis s 1
			Pis s 2
			Pis s 3
	Cow's milk	<i>Bos domesticus</i>	Bos d_milk *
			nBos d 4
			nBos d 5
			nBos d 8
	Egg white	<i>Gallus domesticus</i>	Gal d_white *
			nGal d 1
			nGal d 2
			nGal d 3
			nGal d 4
Egg yolk	<i>Gallus domesticus</i>	Gal d_yolk *	
		nGal d 5	

	Common name	Scientific name	Extracts & Components
<b>Foods</b>	Beef	<i>Bos domesticus</i>	Bos d_meat *
			nBos d 6
			Bos d 7
			Bos d_ACTA1
			Bos d_LDHA
	Horse	<i>Equus caballus</i>	Equ c_meat *
	Rabbit	<i>Oryctolagus spp.</i>	Ory_c_meat *
			Ory_c_CKM
			Ory_c_GAPDH
			Ory_c_PGM1
			Ory_c_PKM
	Lamb	<i>Ovis aries</i>	Ovi a_meat *
			Ovi a_IgG
	Pig	<i>Sus domesticus</i>	Sus d_meat *
	Chicken	<i>Gallus domesticus</i>	rSus d 1
			Gal d_meat *
			Gal d 7
Gal d 9			
Gal d_PKM			
Turkey	<i>Meleagris gallopavo</i>	Mel g *	
Mealworm	<i>Tenebrio molitor</i>	Ten m *	
Herring, Atlantic	<i>Clupea harengus</i>	Clu h *	
		rClu h 1	

	Common name	Scientific name	Extracts & Components
<b>Foods</b>	Cod, Atlantic	<i>Gadus morhua</i>	Gad m *
			nGad m 1
			Gad m 2+3
			Gad m 4
	Salmon, Atlantic	<i>Salmo salar</i>	Sal s *
			Sal s 1
			Sal s 2
			Sal s 3
			Sal s 4
			Sal s 6
			Sal s 7
			Sal s 8
	Mackerel, Atlantic	<i>Scomber scombrus</i>	Sco s *
			rSco s 1
	Tuna	<i>Thunnus albacares</i>	Thu a *
	Carrot	<i>Daucus carota</i>	Thu a 1
			Dau c *
Tomato	<i>Solanum lycopersicum</i>	rDau c 1	
		Sola l *	
Potato	<i>Solanum tuberosum</i>	rSola l 6	
		Sol t *	
		Sol t 2	
		Sol t_GBSSI	

\* Extract