

## **Recombinant allergens**

## New challengies in the diagnostics of allergies

Allergen sequence selection: AA sequence of all EXBIO allergens were selected accordingly to data presented on the official site for systematic allergen nomenclature (www.allergen.org, approved by WHO/IUIS).

**High purity:** Advantage of recombinant allergens, compared to allergen extracts, is that they do not contain non-allergenic impurities or contamination by other allergens, which could possibly lead to false-positive results. Recombinant allergens are produced in appropriate expression systems, accordingly to the nature of each particular allergen, followed by at least 2 sequential chromatography purification steps, to ensure high product purity.

**Lot-to-lot consistency:** Reagent packagings of recombinant allergens contain precisely defined amount of specific protein, compared to allergen extracts, which suffer from high variability between lots (this applies particularly for allergens concentration in the mix and their ratio). Lot-to-lot consistency is ensured by outstanding level of product development, manufacture and QC control (ISO 9001:2015 certified Quality Management System).

**Intended use:** Development of qualitative and quantitative allergy tests and assays for assessment of patients reactivity profiles or follow up of allergic patients during immunotherapy.

**Application:** Recombinant allergens are intended for ELISA application. Other applications than ELISA must be verified by the user.







## BULK amounts available for the development of allergen specific diagnostic tests.

Allergen	Description	Packaging	Cat. number
Recombinant pollen allergens			
rArt v 1 (Artemisia vulgaris 1.0101)	Recombinant protein rArt v 1 is expressed in Escherichia coli. DNA sequence encoding 128 AAs. Calculated theoretical molecular mass of recombinant protein is 12.9 kDa.	100 µg	10-P201-C100
rBet v 2 (Betula verrucosa 2.0101)	Recombinant protein rBet v 2 is expressed in Escherichia coli. DNA sequence encoding 152 AAs. Calculated theoretical molecular mass of recombinant protein is 16.2 kDa.	100 µg	10-P177-C100
rBet v 1 (Betula verrucosa 1.0101)	Recombinant protein rBet v 1 is expressed in Escherichia coli. DNA sequence encoding 172 AAs. Calculated theoretical molecular mass of recombinant protein is 19 kDa.	100 µg	10-P174-C100
rCor a 1 (Corylus avellana 1.0401)	Recombinant protein rCor a 1 is expressed in Escherichia coli. DNA sequence encoding 174 AAs. Calculated theoretical molecular mass of recombinant protein is 19.1 kDa.	100 µg	10-P192-C100
rPhl p 5 (Phleum pratense 5.0101)	Recombinant protein rPhI p 5 is expressed in Escherichia coli. DNA sequence encoding 300 AAs. Calculated theoretical molecular mass of recombinant protein is 30 kDa.	100 µg	10-P175-C100
rPhl p 7 (Phleum pratense 7.0101)	Recombinant protein rPhI p 7 is expressed in Escherichia coli. DNA sequence encoding 90 AAs. Calculated theoretical molecular mass of recombinant protein is 10 kDa.	100 µg	10-P176-C100
Recombinant food allergens			
rApi g 1 (Apium graveolens 1.0101)	Recombinant protein rApi g 1 is expressed in Escherichia coli. DNA sequence encoding 167 AAs. Calculated theoretical molecular mass of recombinant protein is 17.9 kDa.	100 µg	10-P149-C100
rAra h 1 (Arachis hypogaea 1.0101)	Recombinant protein rAra h 1 is expressed in Escherichia coli. DNA sequence encoding 614 AAs. Calculated theoretical molecular mass of recombinant protein is 70.2 kDa.	100 µg	10-P202-C100
rDau c 1 (Daucus carota 1.0101 )	Recombinant protein rDau c 1 is expressed in Escherichia coli. DNA sequence encoding 167 AAs. Calculated theoretical molecular mass of recombinant protein is 17.5 kDa.	100 µg	10-P193-C100
rMal d 1 (Malus domestica 1.0101)	Recombinant protein rMal d 1 is expressed in Escherichia coli. DNA sequence encoding 180 AAs. Calculated theoretical molecular mass of recombinant protein is 19.9 kDa.	100 µg	10-P194-C100
Recombinant animal allergens			
rCan f 1 (Canis familiaris 1.0101)	Recombinant protein rCan f 1 is expressed in Escherichia coli. DNA sequence encoding 169 AAs. Calculated theoretical molecular mass of recombinant protein is 18.8 kDa.	100 µg	10-P188-C100
rFel d 1 (Felis domesticus 1.0101)	Recombinant protein rFel d 1 is expressed in Escherichia coli. DNA sequence encoding 175 AAs. Calculated theoretical molecular mass of recombinant protein is 19.4 kDa.	100 µg	10-P189-C100

Coming soon:		
rBet v 4 (Betula verrucosa 4.0101)		
rBet v 6 (Betula verrucosa 6.0102)		
rBet v 7 (Betula verrucosa 7.0101)		
rPhl p 6 (Phleum pratense 6.0101)		
rAra h 8 (Arachis hypogaea 8.0101)		

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WHO/IUIS ... World Health Organisation, International Union of Immunological Societes. Manufactured by Apronex Ltd., an EXBIO company.