

Datasheet for ABIN7506045  
**Major Allergen Cor a 1 Protein**



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5 Images

### Overview

Quantity:	0.1 mg
Target:	Major Allergen Cor a 1
Origin:	Hazel
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Application:	ELISA, Flow Cytometry (FACS), Western Blotting (WB)

### Product Details

Purpose:	rCor a 1 (Corylus avellana 1.0401)
Characteristics:	Recombinant protein rCor a 1 is expressed in Escherichia coli. DNA sequence encoding 174 AAs was fused with Strep-tag at the N-terminus. A calculated molecular mass of recombinant protein is 19,1 kDa.
Purification:	Purified by sequential steps of ion exchange and affinity chromatography.

### Target Details

Target:	Major Allergen Cor a 1
UniProt:	<a href="#">Q9SWR4</a>

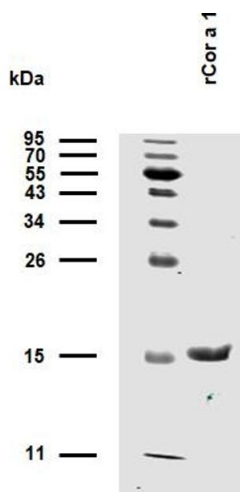
### Application Details

Application Notes:	Optimal working dilution should be determined by the investigator.
Restrictions:	For Research Use only

## Handling

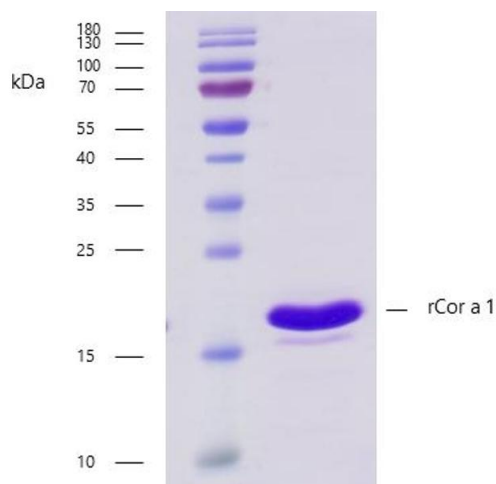
Format:	Lyophilized
Buffer:	Lyophilized from a 0.2 µm filtered solution in Storage buffer (100 mM Tris, 150 mM NaCl, 0.01 % Tween 20, pH 8.0).
Preservative:	Azide free
Storage:	4 °C
Storage Comment:	Store at -20°C to -80°C. Reconstitute in sterile deionized water. Use reconstituted product immediately or aliquot for further storage at -20°C to -80°C.

## Images



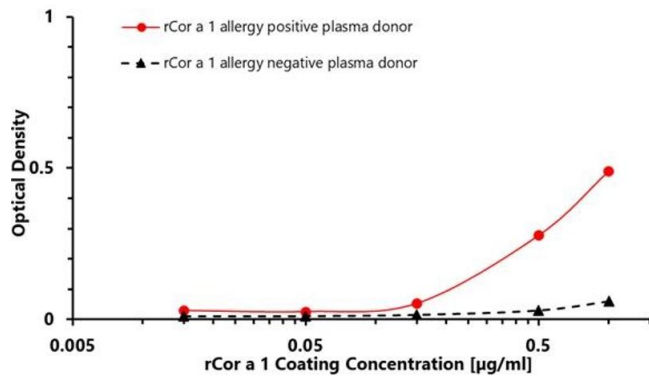
### Western Blotting

**Image 1.** Analysis of presence of sIgE antibodies specific to Cor a 1 (a common hazel antigen) in plasma of a patient with allergic reaction to common birch pollen (confirmed by routine clinical test). Western blotting analysis was performed on recombinant allergen rCor a 1 mixed and heated (100 °C, 5 min) with reducing SDS loading buffer. Sample was resolved using 15 % Tris-glycine gel electrophoresis. Nitrocellulose membrane blot was incubated with plasma of an allergic patient (1:10). Captured rCor a 1 sIgE antibodies were detected by biotinylated anti-human IgE secondary antibody (2 µg/mL) followed by IRDye 800CW Streptavidin (1:5000). The analysed patient plasma contained sIgE antibodies specific to Cor a 1.



### SDS-PAGE

**Image 2.** Recombinant allergen rCor a 1 purity verification. 5 µg of rCor a 1 with > 95 % purity checked by Coomassie Brilliant Blue stained SDS-PAGE.



### ELISA

**Image 3.** ELISA (enzyme-linked immunosorbent assay) test was designed to prove the bond between the coated target recombinant allergen rCor a 1 and allergen-specific human plasma IgG4 antibodies of *Corylus avellana* positive donor. A measurable signal was subsequently generated by the addition of biotin labeled anti-human IgG4 (detection) antibody, Streptavidin-HRP and substrate solution (TMB). The intensity of the signal is proportional to the amount of coated rCor a 1.

Please check the [product details page](#) for more images. Overall 5 images are available for ABIN7506045.