

Recombinant allergen Pla a 1 for *Platanus acerifolia* (London plane tree)

CATALOG NUMBER: RAL0019

LOT NUMBER: #

RECOMBINANT ALLERGEN: the plane pollen major allergen protein Pla a 1 (Asturias *et al.*, 2002).

DESCRIPTION: the putative invertase inhibitor from *Platanus acerifolia* has been prepared as a recombinant mature allergen fused to a his-tag.

PRESENTATION: liquid protein solution

SOURCE: *Pichia pastoris*

MOLECULAR WEIGHT: determined by SDS-PAGE, the protein band is at the molecular marker of 18,400 Da, while relative molecular mass calculated from amino acid sequence is 20,743.5 Da

BATCH COMPOSITION:

COMPONENTS	COMPOSITION
his-Pla a 1	recombinant allergen with a his-tag
Storage buffer	20 mM phosphate buffer pH 8, 0.15 M NaCl and 5 mM EDTA

QUALITY CONTROL:

1. PROTEIN CONCENTRATION DETERMINED ESPECTROPHOTOMETRICALLY

DO₂₈₀ = 1.001
A_{0.1%} (=1 g/l) = 0.901
CONCENTRATION*: 1.11 mg/ml

* The measurement of the protein concentration has been performed with the theoretical extinction coefficient of the recombinant protein obtained from Gill and vonHippel, 1989

2. PURITY CONTROL IN SDS-PAGE: 17%

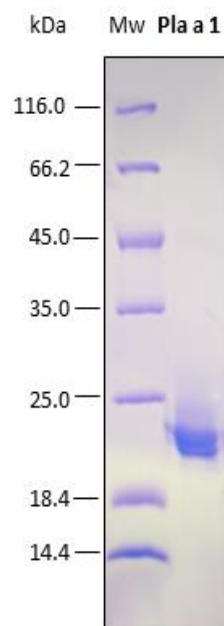


Figure 1. SDS-PAGE analysis (17%) of 5 µl of recombinant allergen. Purity is approx. 90% as determined by gel electrophoresis.

3. ABSENCE OF PRECIPITATION AFTER A FREEZING AND THAWING CYCLE: ok

LOT SPECIFICATIONS:

- 1. CONCENTRATION:** 1.11 mg/ml
- 2. TOTAL QUANTITY PER ALIQUOT:** 1 mg
- 3. TOTAL VOLUME PER ALIQUOT:** 0.946 ml
- 4. STORAGE:** Protein is shipped with dry ice. Upon arrival, it should be aliquoted in order to avoid repeated freezing and thawing cycles and stored at -20°C to -80°C.
- 5. OBSERVATIONS:** proteins should be maintained frozen at high concentrations. In order to defrost the protein, maintain the aliquot at 25°C without shaking to avoid aggregation. Prior making test dilutions and after defrosting the protein, is recommended to remove possible protein aggregates by centrifuging the stock solution, avoiding alterations in the immobilization of the biomolecule to the solid surface.

RELATED PRODUCTS:

Pla a 3.

BIBLIOGRAPHY:

Asturias JA, Ibarrola I, Bartolomé B, Ojeda I, Malet A, Martínez A. Purification and characterization of Pla a 1, a major allergen from *Platanus acerifolia* pollen. 2002. *Allergy*, 57:221-7.

Lowry, OH, NJ Rosbrough, AL Farr, and RJ Randall. Protein measurement with the Folin phenol reagent. 1951. *J. Biol. Chem.* 193: 265.

Important Notes: During shipment, small volumes of product will occasionally become entrapped in the seal of the product vial. For products with volumes of 200 µl or less, we recommend gently tapping the vial on a hard surface or briefly centrifuging the vial in a tabletop centrifuge to dislodge any liquid in the containers cap.

Although recombinant antigens are expressed in non-pathogenic *P. pastori* and bacterial integrity is destroyed during purification, the antigen preparation should be handled as potentially infectious.

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