Recombinant allergen Can f 5 for *Canis familiaris (Dog)*

CATALOG NUMBER: RAL0014 **LOT NUMBER:** #

RECOMBINANT ALLERGEN: *Canis familiaris* Can f 5 (Mattsson *et al*., 2009).

DESCRIPTION: the *Canis familiaris* prostatic kallikrein, Can f 5, 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 between molecular markers of 35,000 and 25,000 Da, while relative molecular mass calculated from amino acid sequence is 29,432.79 Da.

BATCH COMPOSITION:

COMPONENTS	COMPOSITION
his-Can f 5	recombinant allergen with a his-tag
Storage buffer	20 mM phosphate buffer pH 7 and 0.15 M NaCl

QUALITY CONTROL:

1. PROTEIN CONCENTRATION DETERMINED ESPECTROPHOTOMETRICALLY

DO_{280} = 1.60
$A_{0.1\ \%}$ (=1 g/l) = 1.446
CONCENTRATION*: 1.1 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: 15%

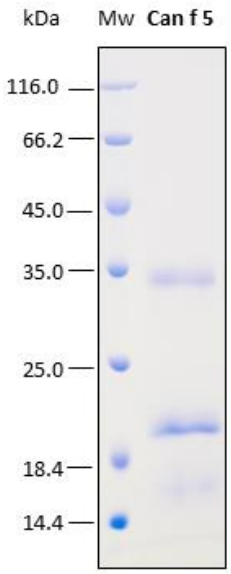
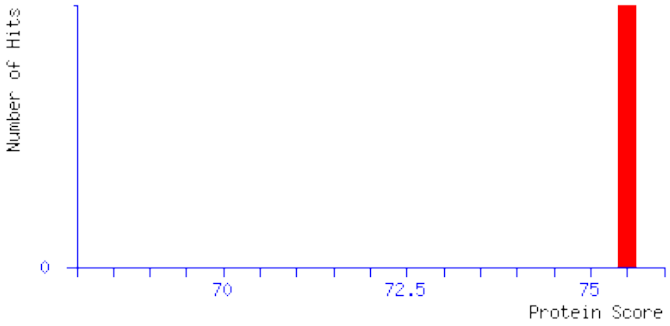


Figure 1. SDS-PAGE analysis (15%) of 5 µl of recombinant allergen. Purity is >95% as determined by gel electrophoresis. Bands slightly smaller correspond to the same protein.

3. PROTEIN FINGERPRINT BY MASS SPECTROMETRY

Top Score: 76 for Can f 5

Protein score is -10*Log(P), where P is the probability that the observed match is a random event. Protein scores greater than 16 are significant (p<0.05).



Canf5 **Mass:** 31018 **Score:** 72 **Expect:** 1.4e-007 **Matches:** 14

The MS was performed with a by MALDI TOF/TOF model UltrafleXtreme (Bruker).

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

LOT SPECIFICATIONS:

1. CONCENTRATION: 1.1 mg/ml

2. TOTAL QUANTITY PER ALIQUOT: 1 mg

3. TOTAL VOLUME PER ALIQUOT: 0.954 ml

4. STORAGE: Protein is shipped with dry ice. Upon arrival, it should be aliquoted to avoid repeated freezing and thawing cycles and stored at -20ºC to -80ºC.

5. OBSERVATIONS: proteins should be maintained frozen at high concentrations. In order to defrost the protein, maintain the aliquot at 25ºC 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:

Can f 1.

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BIBLIOGRAPHY:

Mattsson *et al*. prostatic kallikrein: a new major dog allergen. 2009, J Allergy Clin Immunol 2009; 123:362-368

Gill SC, von Hippel PH. Calculation of protein extinction coefficients from amino acid sequence data. *Anal Biochem.* 1989 Nov 1;182(2):319-26.

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. pastoris* and bacterial integrity is destroyed during purification, the antigen preparation should be handled as potentially infectious.

FOR RESEARCH AND COMMERCIAL USE *IN VITRO*: not for human *in vivo* or therapeutic use.

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