

## Natural Der f 2 Molecular Reference Standard

**Product Code: MRS-NDF2**

The Natural Der f 2 MRS is intended to serve as reference standard to determine the Der f 2 content of allergen preparations from house dust mite (*Dermatophagoides farinae*) by immunoassay.

Allergen: Natural Der f 2 (*Dermatophagoides farinae* allergen 2)

Lot No: xxxxx

Source: *D. farinae* culture

Mol. Wt: 14kD

Purification: From spent mite culture by multi-step affinity chromatography.



nDer f 2

Composition: 10µg natural Der f 2, determined by Amino Acid Analysis, freeze dried in sealed glass vial.

SDS-PAGE: See inset. Silver-stained SDS-PAGE under non-reducing conditions shows a single band at 14kD.

ELISA: Immunoreactive in Der f 2 specific ELISA. No trace contamination with Der f 1 was detected by ELISA.

Purity: >95% purity by in-solution LC-MS/MS after tryptic digest.

Formulation: Prior to lyophilization, natural Der f 2 was adjusted to 50 mM volatile ammonium bicarbonate with 3% trehalose.

Storage: Store at -20°C.

Use: **For Research Use Only: Not for Diagnostic or Therapeutic Use**

The Natural Der f 2 MRS is an Inbio™ product.

# Natural Der f 2 Molecular Reference Standard



**Product Code: MRS-NDF2-1**

## Reconstitution:

- Allow vial to reach room temperature before use.
- Tap vial gently to collect all material at the bottom.
- Using a sterile syringe reconstitute the MRS to desired concentration by injecting a suitable volume of a buffer of choice (e.g. PBS, pH 7.4 or 1% BSA/50% glycerol/PBS, pH 7.4).
- Mix by gently swirling the vial until content is completely dissolved.
- Adding 1ml of buffer will result in a Der f 2 concentration of 10,000ng/ml.



## References:

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2. Mueller GA, Smith AM, Williams DC Jr., Hakkaart GAJ, Aalberse RC, Chapman MD, Rule, GS, Benjmin DC. Expression and secondary structure determination by NMR methods of the major house dust mite allergen Der p 2. J Biol Chem 1997;272:26893-8.
3. Smith AM et al. The molecular basis of antigenic cross-reactivity between the group 2 mite allergens. J Allergy Clin Immunol 2001;107:977-84.
4. Chapman MD et al. The European Union CREATE project: a model for international standardization of allergy diagnostics and vaccines. J Allergy Clin Immunol. 2008;122:882-889.
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7. Chapman MD and Briza P. Molecular approaches to allergen standardization. Curr Allergy Asthma Rep. 2012;12:478-84.
8. Chapman MD et al. Technological Innovations for High-Throughput Approaches to In Vitro Allergy Diagnosis. Curr Allergy Asthma Rep. 2015;15:36.