

## Purified Natural Der p 1

**Product Code: NA-DP1-2**

Allergen: nDer p 1 (*Dermatophagoides pteronyssinus* allergen 1)

Lot No: xxxxxxxx

Source: *D.pteronyssinus* culture medium

Mol. Wt: 24 kD

Purification: From mite culture by affinity chromatography. Purity on silver stained SDS-PAGE >90% (see gel above)

Concentration: See product insert

Formulation: Preservative-free and carrier-free in phosphate buffered saline, pH 7.4. Sterile filtered.

Storage: Store at -20°C

Notes: (1) Not tested for endotoxin. (2) Similar nDer p 1 preparations have been used in studies to analyze the cysteine protease activity of Der p 1, for T cell proliferation studies and antibody binding.



nDer p 1

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

**REFERENCES:**

1. Lombardero M, Heymann PW, Platts-Mills TAE, Fox JW, Chapman MD. Conformational stability of B cell epitopes on Group 1 and Group II *Dermatophagoides* spp. Allergens. Effect of thermal and chemical denaturation on the binding of murine IgG and human IgE antibodies. *J Immunol* 1990;144:1353-1360.
2. Hewitt CRA, Brown AP, Hart BJ, Pritchard DL. A major house dust mite allergen disrupts the Immunoglobulin E network by selectively cleaving CD23: innate protection by antiproteases. *J Exp Med* 1995;182:1537-1544.
3. Gough L, Schultz O, Sewell HF, Shakib F. The cysteine protease activity of the major house dust mite allergen Der p 1 selectively enhances the immunoglobulin E antibody responses. *J Exp Med* 1999; 190:1897-1901.
4. Schultz O, Laing P, Sewell HF, Shakib F. Der p 1, a major allergen of the house dust mite, proteolytically cleaves the low affinity receptor for human IgE (CD23). *Eur J Immunol* 1995;25:3191-3194.
5. McElveen JE, Clark MR, Smith SJ, Seweel HF, Shakib F. Primary sequence and molecular model of the variable region of a mouse monoclonal anti-Der p 1 antibody showing a similar epitope specificity as human IgE. *Clin Exp Allergy* 1998;28:1427-34.
6. King C, Brennan S, Thompson PJ, Stewart GA. Dust mite proteolytic allergens induce cytokine release from cultured airway epithelium. *J Immunol* 1998; 161:3645-3651.
7. Wan H, Winton HL, Soeller C, Tovey ER, Gruenert DC, Thompson PJ, Stewart GA, Taylor GW, Garrod DR, Cannell MD, Robinson C. Der p 1 facilitates transepithelial allergen delivery by disruption of tight junctions. *J Clin Invest* 1999; 104:123-133.