

## LoTox™ *D. pteronyssinus* Antigen

**Product Code: LTN-DPE-4**

Allergen: *Dermatophagoides pteronyssinus*

Lot No: XXXXX

Source: *D. pteronyssinus* spent mite culture

Mol. Wt: Der p 1: 24 kD and Der p 2: 14 kD

ELISA: Contains: 170 µg/ml Der p 1; 101 µg/ml Der p 2

Concentration: See product insert.

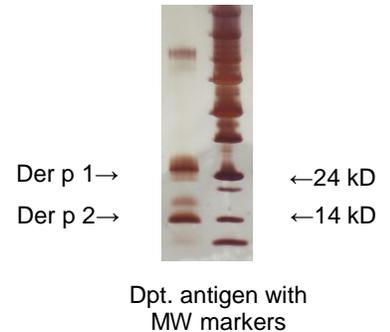
Volume: 1 ml

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

Storage: Store at -20°C. Do not allow product to remain at 4°C or room temperature for extended periods of time. Refreeze unused portion and aliquot into smaller quantities if necessary to avoid freeze/thaw cycles.

Notes:

1. A LoTox™ product: Endotoxin ≤ 0.01 EU/µg.
2. Cysteine protease activity: 533 RFU/min/mg protein
3. Serine protease activity: 5840 RFU/min/mg protein
4. Use sterile tips to avoid contamination of product.
5. Avoid repeated Freeze/Thaw cycles.



**Allergens are provided for research and commercial use in vitro.**  
**Not for human in vivo or therapeutic use.**

### REFERENCES:

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2. 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.
3. 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.
4. 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.
5. 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.
7. Trompette A, Divanovic S, Visintin A, Blanchard C, Hegde RS, Madan R, Thorne PS, Wills-Karp M, Gioannini TL, Weiss JP, Karp CL. Allergenicity resulting from functional mimicry of a Toll-like receptor complex protein. *Nature* 2008, Dec. 7.
8. Chruszcz M, Chapman MD, Vailes LD, Stura EA, Saint-Remy JM, Minor W, Pomés A. Crystal structure of mite allergens Der f 1 and Der p 1 reveal differences in surface-exposed residues that may influence antibody binding. *J Mol Biol*, 2009;386:520-530.