

LoToxTM Recombinant Der p 1 DG

Product Code: LTR-DP1D-1

Allergen: rDer p 1 (*Dermatophagoides pteronyssinus* allergen 1) deglycosylated

Lot No: **31103**

Source: *Pichia pastoris*
 (clone N52Q, N-glycosylation site N52 mutated)



Mol. Wt: 24 kD

Purification: Purified from *Pichia pastoris* culture by multi-step column chromatography. Purity on silver stained SDS-PAGE >95%.

Concentration: 0.9 mg/ml, based on Advanced Protein Assay
 (Cytoskeleton Inc., Denver, CO)

LoToxTM rDer p 1

Formulation: Preservative and carrier-free in sterile, endotoxin-free,
 phosphate buffered saline, pH 7.4. Filtered through 0.22 µm filter.

Storage: Store at **4°C**.

Notes:

1. A LoToxTM product: Endotoxin ≤ 0.02 EU/µg.
2. Mature form of rDer p 1; proregion removed with acid dialysis.
3. Cysteine protease activity (DTT dependent) >330 RFU @ 0.25µg/ml.

For Research Use Only: Not for Diagnostic or Therapeutic Use

REFERENCES:

1. 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.
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. 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.
5. Best BE, Stedman KE, Bozic CM, Hunter SW, Vailes LD, Chapman MD, McCall CA, McDermott MJ. A recombinant group 1 house dust mite allergen, rDer f 1, with biological activities similar to those of the native allergen. *Prot Exp Pur* 2000;20:462-71.