Recombinant *Alternaria alternata* Allergen, Alt a 1 (ALTA1)

Catalog # 5004

For Research Use Only - Not Human or Therapeutic Use

DESCRIPTION: Recombinant Alt a 1 from *Alternaria alternata*, ALTA1 protein

The fungus *Alternaria alternata (A. alternata)* is a major cause of fungal allergic disease. Its primary allergen, Alt a 1, elicits an IgE antibody response in roughly 80% of patients allergic to Alternaria species. Natural Alt-a1 is a 30-kDa dimer linked by a disulfide bond consisting of two 15-16 kDa monomers (Figure. 1) (1).

Recombinant Alt a 1 has been used to measure patient IgE and IgG antibody responses. It also elicits skin prick reactivity similar to that induced by the native protein or crude *A. alternata* extract. Therefore, it is a reliable tool for evaluating *A. alternata* sensitization (2)

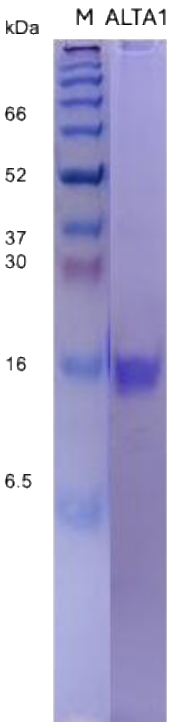

Figure. 1

APPLICATION: ELISA and Western Blot. It can also be used as an allergen to study allergic diseases in experimental animals or *in vitro* experiments.

QUANTITY: 100 µg (the concentration and volume will vary by batch or lot)

FORM: Solution in 50% glycerol in 0.1M Tris-HCl, pH 8.0, 0.5M NaCl

SOURCE: *E. coli*

TAG INFORMATION: N-terminal 6xHis-tagged

MOLECULAR WEIGHT: 18 kDa (Figure 1. 15% SDS-PAGE under reducing conditions)

SEQUENCE 19-157aa (UniProt No. P79085)

APLESRQDTASSPVTTEGDYVWKISEFYGRKPEGTYYNSLGFNIKATNGGTLDFTCSAQADK
LEDHKWYSCGENSFMDFSFDSDRSGLLLKQKVSDDITYVATATLPNYCRAGGNGPKDFVCQ
GVADAYITLVTLPKSS

STORAGE: Store at -20°C. Do not allow the product to remain at 4°C or room temperature for extended periods of time.

STABILITY: 1 year

REFERENCES:

1. M. J. Deards, A. E. Montague, Purification and characterisation of a major allergen of Alternaria alternata. *Mol. Immunol.* **28**, 409–415 (1991).

2. L. D. Vailes, M. S. Perzanowski, L. M. Wheatley, T. A. Platts-Mills, M. D. Chapman, IgE and IgG antibody responses to recombinant Alt a 1 as a marker of sensitization to Alternaria in asthma and atopic dermatitis. *Clin. Exp. Allergy* **31**, 1891–1895 (2001).

© 2026 Chondrex, Inc. All Rights Reserved, 5004 1.0

16928 Woodinville-Redmond Rd NE Suite B-101
Woodinville, WA 98072
Phone: 425.702.6365 or 888.246.6373
Fax: 425.882.3094
www.chondrex.com
support@chondrex.com