

Allergen 8 of fungus *Cladosporium herbarum*, Mannitol dehydrogenase Isoform Cla h 8.0101

Cat# CLAH85-R-100 Recombinant (*E. coli*) purified allergen 8 of fungus *C. herbarum* (Mannitol dehydrogenase Cla h 8.0101, >95%, ~28.5 kDa)

Size: 100 µg

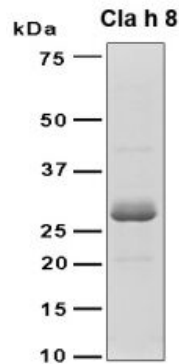
Spores of *Cladosporium* spp. probably occur more abundantly worldwide than any other spore type and are the dominant airborne spores in many areas, especially in temperate climates. (1, 2, 3, 4) Although *C. cladosporioides* may be the most prevalent airborne species, *C. herbarum* frequently dominates indoor and outdoor air and is a major source of fungal inhalant allergens. There are about 500 species of *Cladosporium*. Many are saprophytic on plant litter. *C. herbarum* is widely distributed in our environment and is a major source of fungal inhalant allergen. *C. herbarum* is one of the most common environmental fungi to be isolated worldwide. It occurs abundantly on fading or dead leaves of herbaceous and woody plants, as a secondary invader on necrotic leaf spots, and has frequently been isolated from air, foodstuffs, paints, textiles, humans and numerous other substrates. It is also known to occur on old carpophores of mushrooms and other fungi and as a common endophyte, especially in temperate regions. Under favourable climatic conditions *C. herbarum* also germinates and grows as an epiphyte on the surface of green, healthy leaves.

About 60 antigens from *C. herbarum* have been identified, of which at least 36 react with IgE antibodies from patients' sera. Fungal allergens can be grouped into several categories: proteases; glycosidases; components of protein production; oxidative stress response proteins; and enzymes involved in gluconeogenesis or the pentose phosphate shunt. Proteases and glycosidases are secreted enzymes that have a direct effect on the host. The latter three are suggestive of metabolism in spores germinating in a hostile environment.

The following allergens have been identified to date:

Cla h 1, a 13 kDa protein.
 Cla h 2, a 23 kDa protein.
 Cla h 3, an aldehyde dehydrogenase
 Cla h 4 is now known as Cla h 5.
 Cla h 5, a 11 kDa protein, an acid ribosomal protein P2.
 Cla h 6, a 48 kDa protein, an enolase.
 Cla h 7, a YCP4 protein.
 Cla h 8, a mannitol dehydrogenase
 Cla h 9, a vacuolar serine protease.
 Cla h 10, an aldehyde dehydrogenase.
 Cla h 12, an acid ribosomal protein P1
 Cla h 42kD, a 42 kDa protein.
 Cla h abH, an alpha/beta hydrolase.
 Cla h 8 CSP, a cold shock protein (CSP).
 Cla h GST, a glutathione-S-transferase.
 Cla h HCh1, a hydrophobin.
 Cla h HSP70, Heat Shock Protein 70.
 Cla h NTF2, Nuclear Transport Factor 2
 Cla h TCTP, Translationally Controlled Tumour Protein, also known as Histamine Releasing Factor, HRF, TCTP.

Allergen Source



Cladosporium Cla h 8 allergen protein (2-267aa, protein accession #P0C0Y5) was expressed in *E. coli* and purified (>95%, His tag). It is supplied in a buffer in 4 M urea, 50 mM Tris-HCl (pH 8.0). or lyophilized in the same buffer. Reconstitute powder in water and store frozen in suitable aliquots.

Form and Storage

When stored at -20°C the quality of the material will be maintained for several years. However, for short periods (max. 3 weeks) the lyophilized product may be kept at room

temperature. After reconstitution store at -20°C. Avoid repeated freezing/thawing.

Suggested Uses

ELISA, EIA, Western Blotting, Dot Blotting, Immunoprecipitation, Protein Array, Functional Assay, etc.

Country of Origin: USA

MSDS:

This material is sold for research purposes only and is not required to appear on the TSCA inventory. It is not intended for food, diagnostic, drug, household, agricultural or cosmetic use. Its use must be supervised by a technically qualified individual experienced in handling potentially hazardous chemicals.

This product is for in vitro research use only.

References: Denk U (2002)

<http://www.uniprot.org/uniprot/P0C0Y5>; Denning DW (2006) Eur Respir J.;27:615-26; Vijay HM (2008) Clin Allergy Immunol 2008;21:141-60.;

CLAH85-R-100-Cla h 8.0101-C-Herbarum

150506A