ISOLATED PROTEIN OF ASTRAGALUS MEMBRANACEUS ACTS AS AN ALLERGEN BY BINDING HUMAN IMMUNOGLOBULIN E ON HUMAN SERA

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Allergy is nearly always triggered by protein molecules and the majority of individuals with documented immunologic reaction to foods or plants IgE reactions. However, proteins derived from herbal medicine act as an allergen is unknown. In this study, we aimed to confirm if herbal medicine, Astragalus membranaceus, at proteomic level may contain to trigger the immunoreactivity of IgE. If it does, what components of protein molecules in herbal medicine, Astragalus membranaceus, is react to a binding IgE. In order to resolve this hypothesis, we performed proteomic tools, SDS-PAGE stained coomassie blue and identified protein by LC-MS/MS. Also, we tested plasma IgE reactivity on an isolated protein of Astragalus membranaceus using western blot of human IgE and enzyme immunoassay panel, Allergy-Q test in 400 patients. Through the described performances, we could select four sera of positive candidate and identify Astragalus membranaceusIgE binding proteins. Our data suggested that herbal medicine, Astragalus membranaceus was possible to act an allergen by identify IgE binding protein with isolated protein of Astragalus membranaceus.