G103 Purification and Characterization of Allergen in Mosquito Salivary Gland Extract

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Most people develop skin reactions to mosquito bite, however little is known about mosquito salivary allergens and the IgE responses to them. This study is to identify these allergens and find out specific IgE responses to these allergens. Slivary gland extracts were prepared from *Aedes togoi* and *Culex tritaeniorynchus*. Allergenic components of salivary gland extracts were separated by means of SDS-PAGE. With the sera of subjects reactive to *Aedes togoi*, mosquito specific IgE was determined by immunoblotting and enzyme-linked immunosorbent assay. Major allergens of two mosquito salivary gland extracts were determined from the results of immunoblotting. Five antigenic proteins, with molecular weights of 31, 32, 33, 34 and 36kDa were found in the *A. togoi* salivary gland extracts. Three antigenic proteins, with molecular weights of 38, 43 and 68kDa were found in the *C. tritaeniorynchus* salivary gland extract. We have obtained *A. togoi* salivary gland antigen specific monoclonal antibody.

G301 Isolation and characterization of immunomodulators produced by soil Actinomycetes.

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Various kinds of immunomodulators are produced by Actinomycetes and many antifungal agents such as tacrolimus(FK506) and Amphotericin B have an immunomodulatory actions. In this study, 49 strains of Actinomycetes were isolated from soil samples and 22 strains which produce antifungal agents were selected by paper disc method and agar peice method. The culutre broths of them were tested for the proliferation activity on splenocytes of Balb/c mouse by MTT assay. Strains CGS-1015 and SUS-0608 were selected for proliferative activity and suppressive activity, respectively. The mitogenic compound of CGS-1015 was concentrated by 60% ethanol precipitation after adjusting to pH 5. This mitogenic compound has a stimulatory activity on mouse splenocyte, antibody production and NO production by Raw 264.7, but has no effects on thymocyte proliferation. For isolation of the suppressive agent from SUS-0608, the culture was adjusted to pH 3, then extracted twice with ethyl acetate and purified through silica gel TLC. The purified antifungal agent was identified with UV quenching, iodine spraying and bioautography. This antifungal agent has an immunosuppressive activity on mouse splenocyte proliferation and tumor cell line L929 and Sarcoma 180 and showed higher suppressive activity than Cyclosporin A in mouse mixed lymphocytes culture(MLC).