

**A MONOCLONAL ANTIBODY TO A SURFACE ANTIGEN(S) ON MICROFILARIAE
OF WUCHERERIA BANCROFTI REDUCES THEIR INFECTIVITY TO THE VECTOR**

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A panel of Monoclonal antibodies (Mabs) were produced against microfilariae (mf) of Wuchereria bancrofti. They defined a surface antigen(s) of the parasite as demonstrated by immunofluorescent staining on air-dried mf and ensheathed live mf in suspension and were designated as MfWb1. They belonged to the IgG3 subclass and were stage and species specific as they did not react with the infective stage larvae (L3) of W. bancrofti or other stages of several filarial parasites.

MfWb1 was mixed with blood containing mf of W. bancrofti obtained from infected patients. Laboratory bred Aedes togoi mosquitoes were fed with this blood through artificial membranes. Controls were fed with blood mixed with a Mab which was non-reactive on IFAT. 14 days later, the mosquitoes were dissected and L3 were recovered. When the infected blood was mixed with MfWb1, the infectivity of parasites to mosquitoes was significantly reduced ($P < 0.01$) as seen by the reduction of the numbers of mosquitoes that were infected.

It is possible that because of this phenomenon, immunity against this surface antigen(s) defined by MfWb1 may play a protective role against the parasite either in man, or because mf are the infective stages to the mosquito, during its immediate development in the mosquito, thereby presenting as a target of 'transmission blocking immunity' against this important filarial parasite of man.