

MONOCLONAL ANTIBODIES AGAINST LEUKEMIC HAIRY CELLS THAT ALSO RECOGNIZE T-CELL ACTIVATION ANTIGENS

To the Editor:

I was very interested by the article of Mulligan et al¹ dealing with the reactivity of the monoclonal antibody (MoAb) B-ly-7 with hairy cells and activated CD8 T cells. In 1986, we described similar features of the RAB-1 MoAb.² This murine MoAb, which was produced against leukemic hairy cells (HCL), reacted with all the HCL tested with a high percentage of polymphocytes from B-cell polymphocytic leukemia (PLL) and with a moderate part of the B chronic lymphocytic leukemia cells. Approximately 25% of normal separated B cells expressed the RAB-1. More interestingly, the absence of reactivity with resting T cells, the expression on CD4 class II-positive cloned T-cell line, and the expression on PHA- and ConA-activated T cells suggest that the MoAb RAB-1 recognizes membrane proteins newly developed during T-cell activation.

Previous studies³ have shown that the p35 protein is a constant protein of the hairy cell membrane and is also highly synthesized

during T-cell activation. Because RAB-1 reacted with 35-Kd and 23-Kd bands on immunoblotting and immunoprecipitation assays, the reactivity on activated T cells could be explained by recognition of the p35 protein. Demeter et al⁴ have used the RAB-1 MoAb to further identify a true case of T-HCL, expressing CD8 and RAB-1 in a double-marker assay. Recently, we found a very high expression of the RAB-1 in a series of 24 cases of B-PLL, a disease of activated B cells as HCL.⁵ All these data suggest that the RAB-1 as well as the B-ly-7 represent an activation antigen for the B-cell lineage that recognizes also some steps of the T-cell activation.

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