

CELL BIOLOGY

Generating monoclonal antibodies pertaining to the needs of the institute is an important activity of cell biology department.

Last year we reported a monoclonal antibody against H red cell antigen by hybridoma technique using O group red cells as immunogen. In the same fusion an interesting clone 3F6 showing reactivity with only A group red cells was observed. Detailed investigation of this clone, this year with large number of A, and B and O group red cells showed a preferential reactivity with A1 red cells. This is an interesting observation, since the immunogen was O group red cells. It is likely that the antibody activity may be directed against A1 group transferees commonly present in the ABO structure. Further analysis using molecular study is in progress.

Production of Monoclonal antibody against B red cells.

The aim of this study is to raise a battery of monoclonal antibodies against B antigen which can then be blended to be used as an ideal blood typing reagent. Spleen cells of a female Balb/c mice immunized with B group red cells were fused with sp2/0 mouse myeloma cell line in HAT selective medium. However the fusion resulted in a clone 1B4 which reacted with A, B and O red cells. Investigation using known panel of red cells showed that antibody activity as anti-N Further work is in progress.