

In the article "Functional properties of a unique subset of cytotoxic CD3⁺ T lymphocytes that express Fc receptors for IgG (CD16/Leu-11 antigen)" by Lewis L. Lanier, Thomas J. Kipps, and Joseph H. Phillips (December 1985, 162:2089), figures 7–10 were printed without proper explanatory notes. The figures, with their corrected legends, are reprinted here.

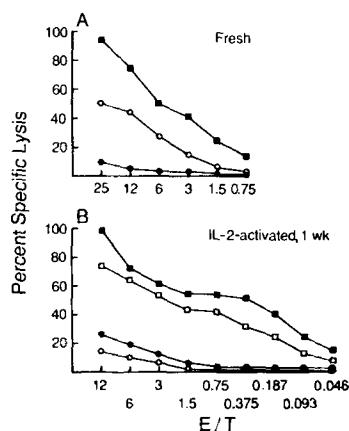


FIGURE 7. NK cell activity of CD3⁺,CD16⁺ and CD3⁻,CD16⁺ lymphocytes. Nonadherent PBL (D. H.), depleted of B cells using a nylon wool column, were stained with FITC-anti-Leu-11a and PE-anti-Leu-4. The CD3⁺,CD16⁺ and CD3⁻,CD16⁺ cells were separated using the FACS. Reanalysis of the separated subpopulations indicated >95% purity. Morphological examination revealed that >99% of the sorted cells were lymphocytes. The sorted subpopulations and stained, unsorted lymphocytes were tested for cytotoxic activity against ⁵¹Cr-labelled K562 tumor cells in a 4-h radioisotope-release assay (A). Stained unsorted cells (○); CD3⁻,Leu-11⁺ cells (■); CD3⁺,Leu-11⁺ cells (●). The CD3⁺,CD16⁺ and CD3⁻,CD16⁺ cells were placed in culture medium containing purified IL-2, and again tested for cytotoxic activity against K562 and CCRF-SB tumor cells after 1 wk. (B). Analysis of the antigenic phenotypes after 1 wk indicated that the CD3⁻,CD16⁺ and CD3⁺,CD16⁺ populations contained ~98% CD3⁻,CD16⁺ and CD3⁺,CD16⁺ cells, respectively. 2% of the cells in the CD3⁺,CD16⁺ culture were CD3⁻,CD16⁺ cells. By extrapolation of the effector/target (E/T) curves, this small contamination of activated CD3⁻,CD16⁺ NK cells may account for the low levels of cytotoxicity observed against K562 in the CD3⁺,CD16⁺ population. With K562 as target: CD3⁻,Leu-11⁺ (■); CD3⁺,Leu-11⁺ (●). With SB as target: CD3⁻,Leu-11⁺ (□); CD3⁺,Leu-11⁺ (○).

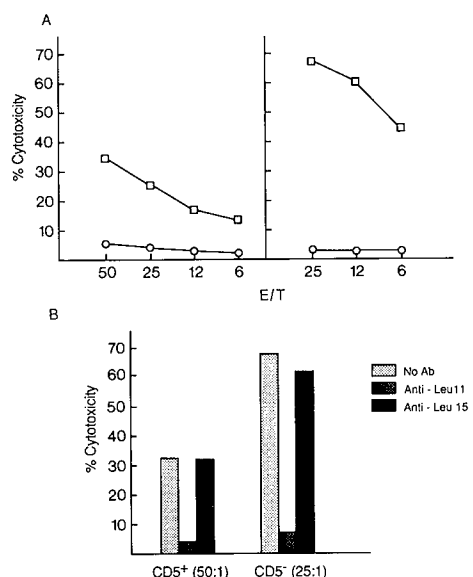


FIGURE 8. ADCC activity of CD5⁻ and CD5⁺ lymphocytes and inhibition by anti-Leu-11 antibody. Nonadherent peripheral blood mononuclear cells from D. H. were stained with FITC-anti-Leu-1 (CD5) and separated into CD5⁺ and CD5⁻ subsets using a FACS. Reanalysis indicated 98% purity. *A*: CD5⁻ (*right*) and CD5⁺ (*left*) lymphocytes were tested for ADCC activity against ⁵¹Cr-labelled JY tumor cells preincubated with an IgG2a anti-HLA mAb, ME1 (ME1 γ_{2a} , \square). No cytotoxicity was observed against JY cells not preincubated with antibody (\circ). *B*: Anti-Leu-11 or anti-Leu-15 mAb were added to the ADCC assay (using ME1 γ_{2a} -coated JY as target) at 5 μ g/ml. JY target cells do not express the CD16 (Leu-11) or CR₃ (Leu-15) antigens.

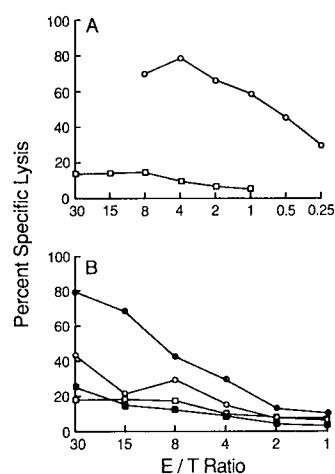


FIGURE 9. ADCC activity of CD3⁺,CD16⁺ lymphocytes. After 3 wk culture in IL-2-containing medium, CD3⁻,CD16⁺ and CD3⁺,CD16⁺ lymphocytes were tested for NK cell-mediated cytotoxicity against the JY B lymphoblastoid cell line in a 4-h radioisotope-release assay. CD3⁻,Leu-11⁺ (\circ); CD3⁺,Leu-11⁺ (\square) (*A*). In *B*, the ADCC activity of the CD3⁺,CD16⁺ cells was tested in a 4-h radioisotope-release assay using ⁵¹Cr-labelled JY cells preincubated with isotype switch-variants of the MA2.1 (anti-HLA-A2-specific) mAb. Effectors were CD3⁺,Leu-11⁺. IgG2a MA2.1 (\bullet), IgG2b MA2.1 (\circ), IgG1 MA2.1 (\blacksquare), none (\square).

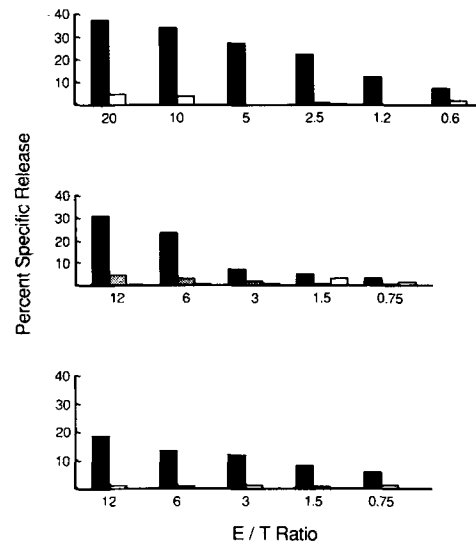


FIGURE 10. Anti-CD3-induced cytotoxicity mediated by CD3⁺,CD16⁺ lymphocytes. After 3 wk in culture in IL-2-containing medium, CD3⁺,CD16⁺ lymphocytes were tested for cytotoxic activity against the JY (*top*), Daudi (*middle*), and LCL 207 (*bottom*) B cell lines in the presence of anti-Leu-4 mAb (4 μ g/ml) (■), anti-Leu-11 mAb (4 μ g/ml; Daudi experiment) (□), or no mAb (□).