

In the article "Functional properties of a unique subset of cytotoxic CD3<sup>+</sup> 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.

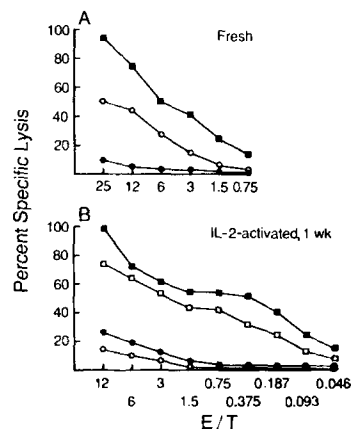
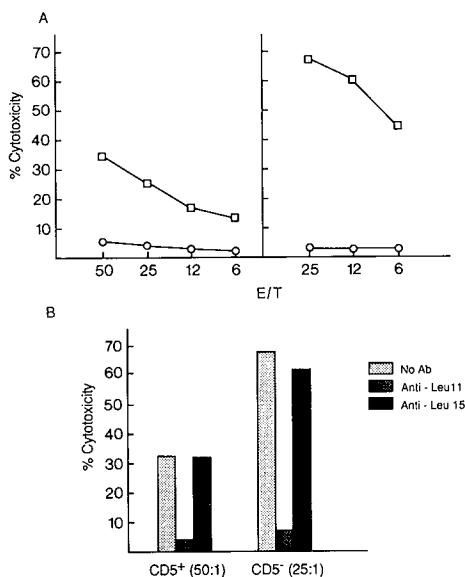
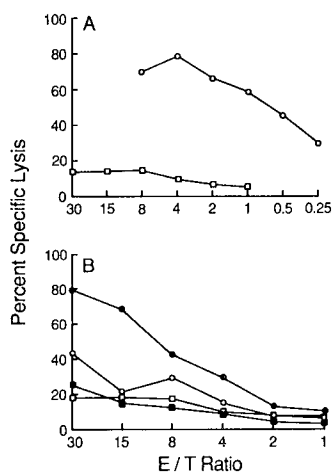


FIGURE 7. NK cell activity of CD3<sup>+</sup>,CD16<sup>+</sup> and CD3<sup>-</sup>,CD16<sup>+</sup> lymphocytes. Nonadherent PBL (D. H.), depleted of B cells using a nylon wool column, were stained with FITC-anti-Leu-11a and PE-anti-Leu-4. The CD3<sup>+</sup>,CD16<sup>+</sup> and CD3<sup>-</sup>,CD16<sup>+</sup> 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 <sup>51</sup>Cr-labelled K562 tumor cells in a 4-h radioisotope-release assay (A). Stained unsorted cells (○); CD3<sup>-</sup>,Leu-11<sup>+</sup> cells (■); CD3<sup>+</sup>,Leu-11<sup>+</sup> cells (●). The CD3<sup>+</sup>,CD16<sup>+</sup> and CD3<sup>-</sup>,CD16<sup>+</sup> 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 in culture indicated that the CD3<sup>-</sup>,CD16<sup>+</sup> and CD3<sup>+</sup>,CD16<sup>+</sup> populations contained ~98% CD3<sup>-</sup>,CD16<sup>+</sup> and CD3<sup>+</sup>,CD16<sup>+</sup> cells, respectively. 2% of the cells in the CD3<sup>+</sup>,CD16<sup>+</sup> culture were CD3<sup>-</sup>,CD16<sup>+</sup> cells. By extrapolation of the effector/target (E/T) curves, this small contamination of activated CD3<sup>-</sup>,CD16<sup>+</sup> NK cells may account for the low levels of cytotoxicity observed against K562 in the CD3<sup>+</sup>,CD16<sup>+</sup> population. With K562 as target: CD3<sup>-</sup>,Leu-11<sup>+</sup> (■); CD3<sup>+</sup>,Leu-11<sup>+</sup> (●). With SB as target: CD3<sup>-</sup>,Leu-11<sup>+</sup> (□); CD3<sup>+</sup>,Leu-11<sup>+</sup> (○).



**FIGURE 8.** ADCC activity of CD5<sup>-</sup> and CD5<sup>+</sup> 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<sup>+</sup> and CD5<sup>-</sup> subsets using a FACS. Reanalysis indicated 98% purity. *A*: CD5<sup>-</sup> (*right*) and CD5<sup>+</sup> (*left*) lymphocytes were tested for ADCC activity against <sup>51</sup>Cr-labelled JY tumor cells preincubated with an IgG2a anti-HLA mAb, ME1 (ME1 $\gamma_{2a}$ ,  $\square$ ). 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 $\gamma_{2a}$ -coated JY as target) at 5  $\mu$ g/ml. JY target cells do not express the CD16 (Leu-11) or CR<sub>3</sub> (Leu-15) antigens.



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

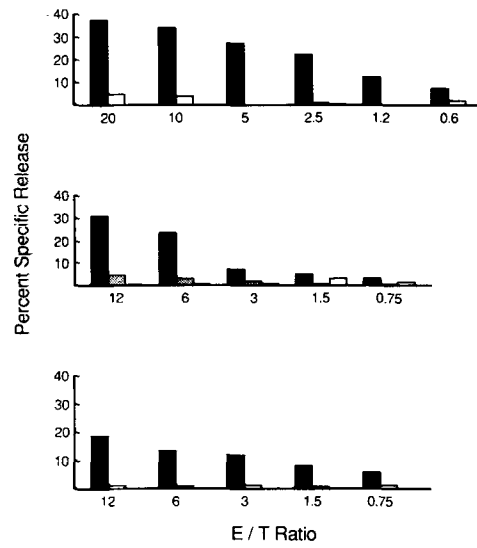


FIGURE 10. Anti-CD3-induced cytotoxicity mediated by CD3<sup>+</sup>,CD16<sup>+</sup> lymphocytes. After 3 wk in culture in IL-2-containing medium, CD3<sup>+</sup>,CD16<sup>+</sup> lymphocytes were tested for cytotoxic activity against the JY (*top*), Daudi (*middle*), and LCL 207 (*bottom*) B cell lines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