

Randolph et al. Vol. 196, No. 4, August 19, 2002. Pages 517–527.

Due to a typographical error, a CD16[−] and CD16⁺ were switched in the middle of the third paragraph of page 521. The corrected paragraph appears below.

Differentiation and Migration Analysis after Depletion of CD16⁺ Monocytes. In some depletion experiments, only the M-DC8⁺ subpopulation of CD14⁺CD16⁺ monocytes was removed. Removal of M-DC8⁺ cells only had no marked effect on the yield or phenotype of reverse-transmigrated cells (unpublished data), but when the depletion scheme eliminated all CD16⁺ monocytes (CD16 depleted), $47 \pm 22\%$ ($P < 0.05$; four experiments) to $66 \pm 13\%$ ($P < 0.005$; four experiments) fewer reverse transmigrated cells were recovered from unstimulated and zymosan-stimulated cultures, respectively (Fig. 6 A). These results are in agreement with the CFSE experiments in Fig. 3. Even after thorough depletion of CD16⁺ monocytes, many reverse-transmigrated cells recovered from cultures receiving only the CD16[−] monocytes expressed CD16 upon reverse transmigration, in contrast to the subendothelial monocyte-derived cells from the same cultures (Fig. 6 B). Thus, these cells appear to upregulate CD16 expression during reverse transmigration. When flow cytometry was conducted to analyze the maturation status of cells in the reverse-transmigrated fraction, the number of HLA-DR⁺CD86⁺ cells was $63 \pm 14\%$ (average of three experiments; $P < 0.005$) decreased per unit area of endothelial cell surface when blood CD16⁺ monocytes were depleted from the starting population (Fig. 6 C; cells shown in each group were recovered from an equivalent area of endothelial surface). Moreover, the residual DCs recovered after depletion of CD16⁺ monocytes expressed an order of magnitude less CD86 on the cell surface, indicating that these reverse-transmigrated, CD16[−] monocyte-derived cells were less mature than the reverse-transmigrated cells that develop in cultures that contained CD16⁺ blood monocytes.