

CD11d β 2 integrin expression on human NK, B, and γ δ T cellsGabrielle M. Siegers, ... [See all authors](#) >

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Abstract

The CD11d integrin is expressed on the cell surface of leukocytes that belong to the myeloid lineage, but its expression on lymphocytes remains unexplored. To test the hypothesis that CD11d is expressed on lymphocyte subsets, we employed a multicolor flow cytometry panel to identify CD11d expression on B, NK, CD4⁺ and CD8⁺ α β T cells (α β Tc), and γ δ T cells (γ δ Tc) in human PBMC samples. CD11d was highly expressed on NK cells, B cells, and γ δ Tc, but not α β Tc. CD11d expression was higher on freshly isolated γ δ Tc compared with α β Tc from healthy donors, yet both inter- and intradonor variability was evident. Over time in primary culture, we consistently observed higher CD11d levels on γ δ Tc compared with α β Tc from the same donor. Furthermore, CD11d expression on γ δ Tc increased over time and correlated with levels of IL-2 supplementation. Of interest, a greater percentage of V δ 1 γ δ Tc expressed CD11d than did V δ 2 γ δ Tc, which suggested differential roles for this integrin that may segregate with γ δ Tc subsets. These results expand the potential for CD11d to regulate lymphocyte migration and tissue retention, and illuminate the possibility of a previously unconsidered role for CD11d in leukocyte biology and disease.

Supporting Information



