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Titel des Beitrags: Dendritic cell precursor populations of mouse blood: identification of the murine homologues of human blood plasmacytoid pre-DC2 and CD11c+ DC1 precursors.

Abstract: Immature and predendritic cells (pre-DCs) of human blood are the most readily accessible human DC sources available for study ex vivo. Murine homologues of human blood DCs have not been described. We report the isolation and characterization of 2 populations of precursor DCs in mouse blood. Mouse blood cells with the surface phenotype CD11c(lo)CD11b(-)CD45RA(hi) closely resemble human plasmacytoid cells (or pre-DC2) by morphology and function. On stimulation with oligonucleotides containing CpG motifs (CpG), these cells make large amounts of type 1 interferons and rapidly develop into DCs that bear CD8, though they may be distinct from the CD8(+) DCs in the unstimulated mouse. A second population of cells with the surface phenotype CD11c(+)CD11b(+)CD45RA(-) closely resembles the immediate precursors of pre-DC1, rapidly transforming into CD8(-) DCs after tumor necrosis factor-alpha (TNF-alpha) stimulation. These findings indicate the close relationship between human and mouse DCs, provided cells are obtained directly from equivalent source materials.

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