



**Fig. 1: CD45 versus side scatter for ALL, AML, and APL. (A)** Cells falling into the CD45 versus side scatter (SSC) defined blast gate (black circle) comprise less than 5% of the white blood cells by flow cytometry in a normal resting marrow. Acute leukemias are often first recognized as an expansion of cells occupying the CD45 versus SSC defined blast gate. **(B)** Acute myeloid leukemia (AML) typically shows intermediate SSC with decreased CD45, and **(C)** acute lymphoblastic leukemia (ALL) typically shows low SSC with decreased CD45. It should be noted that not all blast equivalents occupy the blast gate. **(D)** For instance, the abnormal blast equivalent seen in acute promyelocytic leukemia (APL) is an abnormal promyelocyte that typically has a very high SSC, approximating that of maturing myeloid cells.