

Cells and Cell lines

Several canine cell lines and cell populations have been developed and/or accumulated by the researchers at FHCRC, and are available to other users. These include embryonic stem cell lines, myeloid leukemia lines, and bone marrow stromal lines. In addition, the presence of a large-scale cell processing Core at FHCRC, and the development of canine cell-surface antibodies have allowed us to generate purified populations of hematopoietic cells. Additional populations of primary cells are available. This list will expand, so please inquire.

Embryonic Stem Cells (ESC): Several ESC lines have been developed in the Torok-Storb lab at FHCRC (Hayes et al., 2008, Stem Cells 25:465-473). Some of these lines express the canonical set of pluripotent genes (Oct4, Sox2, KLF4, cMyc and nanog) and differentiate into identifiable cell types from all three germ layers. The ESC lines, feeder cells, and culture conditions are available.

Myeloid leukemia lines (ML): Lines, ML1 (Kawakami et al., 1989, Leuk. Res. 13:709), as well as ML2 and ML3 (described in McSweeney et al., 1996, Blood 88:1992.) are myeloid leukemia lines with monocyte characteristics, that were generated from dogs after irradiation.

Bone marrow stromal lines (DS): Several cell lines have been developed in the Torok-Storb lab from canine bone marrow stroma. These lines have been used to support hematopoiesis in vitro, and to study the cellular interactions involved in this development.

Purified hematopoietic cell populations: The combination of a large canine research community, and a state-of-the-art large-scale cell processing core, makes it possible to generate immuno-magnetically enriched populations of canine hematopoietic cells, including CD34+, CD3+ and CD14+ populations. Additional populations may become available, so please inquire.

Other canine cells: We have aliquots frozen down of several types of primary cells, including skin fibroblasts, whole blood, PBMC, and bone marrow stroma.