Injection of Tumor Cells

1. Tumor cells, at a prescribed cell concentration, can be injected subcutaneously (20-100 uL), intraperitoneally (200-750 uL), intravenously (50-100 uL), by an intracardiac route (50-100uL), or orthotopically (20-50 uL).

   Recommendations: Use a 25g 5/8” needle for s.c. and i.p. injections of adult mice, 26 g 1/2” needle for i.v. injections, 26-27g 1/2” needle for i.c. injections, and a 30g 1/2” needle for some orthotopic injections.

2. Dilute cells in DPBS and mix well before each injection. Draw the cells into the syringe without a needle to prevent shearing. Attach the needle to the syringe, and before injecting flick or invert the syringe to ensure the cells are in suspension.

Notes:

   a. Do not pass cells through needle more than once since this will shear cells and reduce total cell number.
   b. Be sure to resuspend cells well in the syringe barrel before each injection.
   c. It is recommended that no more than three mice be injected per syringe.
   d. Concentrating cells in a small volume helps to localize and increase the initial signal in vivo.