



Fig. 3. Double immunostaining of *B. burgdorferi*-infected human cells. Left panels represent extracellular spirochetes stained with a rhodamine-conjugated anti-*B. burgdorferi* antibody. Middle panels show the same microscopic field of spirochetes stained with an FITC-conjugated anti-*B. burgdorferi* antibody following permeabilization of fixed cells. Right panels show a merged image of the two stains. Panels: (A–C) human umbilical vein endothelial cells; (D–F) H4 human neuroglial cells; (G–I) HS-683 human neuroglial cells; and (J–L) Human cortical neuronal cells. Panels: (C, F, I) yellow-appearing *Borrelia* indicate extracellular organisms that have been stained with both rhodamine and FITC. Arrows point to the green-staining *Borrelia* indicating intracellular organisms. The diamond arrow (F) points to a spirochete staining part green and part yellow indicative of an organism that has partially entered the cell.

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Jill A. Livenood

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