Figure 1: Culture model using embryonic chick chondrocytes. Chondrocytes were dissected from the upper sternum (US) and lower sternum (LS) of 14-day chick embryos, cultured in monolayer and treated with retinoic acid (RA) at different concentrations (10, 35, and 100 nM) to induce chondrocyte maturation. Photomicrographs of cells show a dose-dependent increase in alkaline phosphatase activity (increase in red color) only on US chondrocytes. LS chondrocytes did not respond to RA nor undergo maturation, and therefore, were used as controls in our studies of maturation-dependent events.