Figure 3. IL-7 increases osteoclast activity in collagen-induced arthritis. Mice were injected with either PBS or IL-7. Osteoclast activity indicated by Cathepsin K expression (brown) was graded for each ankle with a scoring index from 0-3. Representative Cathepsin K staining with H&E counter stain from a arthritic mice of each treatment group demonstrate bone erosion associated with high numbers of active osteoclasts (A: 40x magnification of tibial tarsal joints). Osteoclast activity, indicated by Cathepsin K expression, was significantly increased in IL-7-treated mice as compared to PBS-treated mice (B) (1.4 ± 0.2 vs. 2.4 ± 0.2). Values are mean ± SEM of 15 mice per group. *** indicates statistical differences with PBS group of p<0.005.