



**Supplemental Figure S4.** Cell and tissue specificity of typical enhancers and SEs. (A) Distribution of H3K27ac at selected genes (genomic position represented on the x-axis) in heart, intestine and testis of zebrafish (raw H3K27ac tag counts represented on the y-axis). Typical enhancers and SEs are denoted by grey and red bars, respectively. (B) Chow-Ruskey diagrams representing the overlap of mouse typical enhancer (left) and SE (right) regions between pluripotent state (red), olfactory bulb (blue), heart (green), intestine (purple) and testis (orange). Following the same color designation, color-coded tables show the percentages of cell- or tissue-specific and non-specific regions for each dataset. Differences in the proportion of cell- or tissue-specific regions between typical enhancers and SEs are significant for all tissues, except for ESCs ( $p$ -values  $\leq 1.27 \times 10^{-8}$  based on G-tests of independence). (C) Chow-Ruskey diagrams representing the overlap of human typical enhancer (left) and SE (right) regions between pluripotent state (red), cingulate gyrus (blue), left ventricle (green) and intestine (purple). Color-coded tables as in (B). Differences in the proportion of cell- or tissue-specific regions between typical enhancers and SEs are significant for all tissues ( $p$ -values  $\leq 3.62 \times 10^{-9}$  based on G-tests of independence).