



**Figure S17** Comparison strain x hindbrain interaction effects vs. DNA similarity at 5' and 3' regions. Comparisons of the categories of transcripts based on p-value of strain x hindbrain interaction and IBD status at 5' and 3' regions, for the 4,118 transcripts with variable DNA similarity measurements in the gene body. Here IBD is defined as DNA similarity > 0.999. In the upper panel, the transcripts were grouped based on IBD location and within each group we compared proportion of transcripts within different p-value ranges. The vertical bars indicated the 95% confidence intervals. In the lower panel, the transcripts were grouped based on strain x hindbrain interaction p-values and within each group we compared the proportion of transcripts with different IBD location statuses.