Figure S2.—Sensitivity analysis of functional enrichments in Persistent-GEI versus Transient-GEI classes. To ensure that the differential enrichment of TATA-containing and non/essential genes shown in Table 2 was not due to the specific parameters.
used to call Persistent-GEI versus Transient-GEI genes, a sensitivity analysis was performed in which enrichments were calculated over a range of cutoff values to define groups. Genes with significant GEI from the ANOVA model (FDR < 0.05) were subsequently classified as affected by Persistent GEI if the p-value at the 120 min time point met the designated threshold (x-axis), or subject to Transient GEI if the p-value was greater than that threshold. The significance of enrichment of (A) non-essential genes, (B) genes with upstream TATA elements, and (C) essential genes was scored by Fisher’s Exact test for genes identified as affected by Transient GEI (blue) or Persistent GEI (green) at different selection levels ranging from p = 0.01 to 0.5. The threshold of enrichment significance is indicated by a solid horizontal line in each plot. The GEI selection cutoff of p = 0.05 described in the text is indicated with a dashed vertical line. This analysis shows that the observed enrichments are robust to different cutoffs used to classify genes.