



Supplementary Figure 5 | Summary of Anthropoid-Specific Constrained Elements (ASCs). **a.** Genome browser snapshot of coding anthropoid-specific constrained element. The last exon of PGBD3 is strongly constrained (Pvalue: $8e-15$), and derives from a primate-specific insertion of a piggyBac transposon. **b.** Non-coding coding anthropoid-specific constrained element: the gene desert upstream of the brain-specific gene SNTG1 is rich in non-coding ASCs. **c.** Enhancer assays measuring reporter activity of ASCs (red) and their corresponding mouse orthologs (green) in human embryonic stem cells. **d.** Enhancer assays measuring luciferase activity of ASCs (red) and their corresponding mouse orthologs (green) in mouse embryonic stem cells. In (c) and (d) the fold change values were normalized with respect to the positive controls and elements with fold change of at least 2 (yellow lines) were scored as positive enhancers.