



Gene categories

Sc: Single-copy genes A: Ancient paralogs OI: Old paralogs Y: Young paralogs Ls: Primate-specific paralogs

Supplemental Figure S8: Evolutionary dynamic expression profiles of tissue-specific expressed human genes. Proportions of genes specific to any given tissue are plotted by gene type and duplication age at gene family level. For comparison to proportions using “stringent” definition of tissue specificity and gene level analyses see Supplemental Figure 7. Single-copy genes and paralogs, grouped by duplication age, are shown for each tissue. Bars represent 95% confidence intervals. A) Tissue specificity defined as τ u > 0.8 (Methods). Cortex (brain) and cerebellum were combined into neural tissues and mean was taken to estimate their expression value (Methods). B) Tissue specificity defined as τ u > 0.8 (Methods). Cortex (brain) and cerebellum were assessed separately. C) Tissue specificity defined as twice uniform expression (> 0.29). D) Tissue specificity defined as twice uniform expression (> 0.29) and lowly expressed genes with sum of expression across all tissues < 1 FPKM were removed. E) Tissue specificity defined as twice uniform expression (> 0.29) and only genes above the median expression of all paralogs across all species were considered. F) Tissue specificity defined as twice uniform expression (> 0.29) and only genes below the median expression of all paralogs across all species were considered.