

## Supporting Information

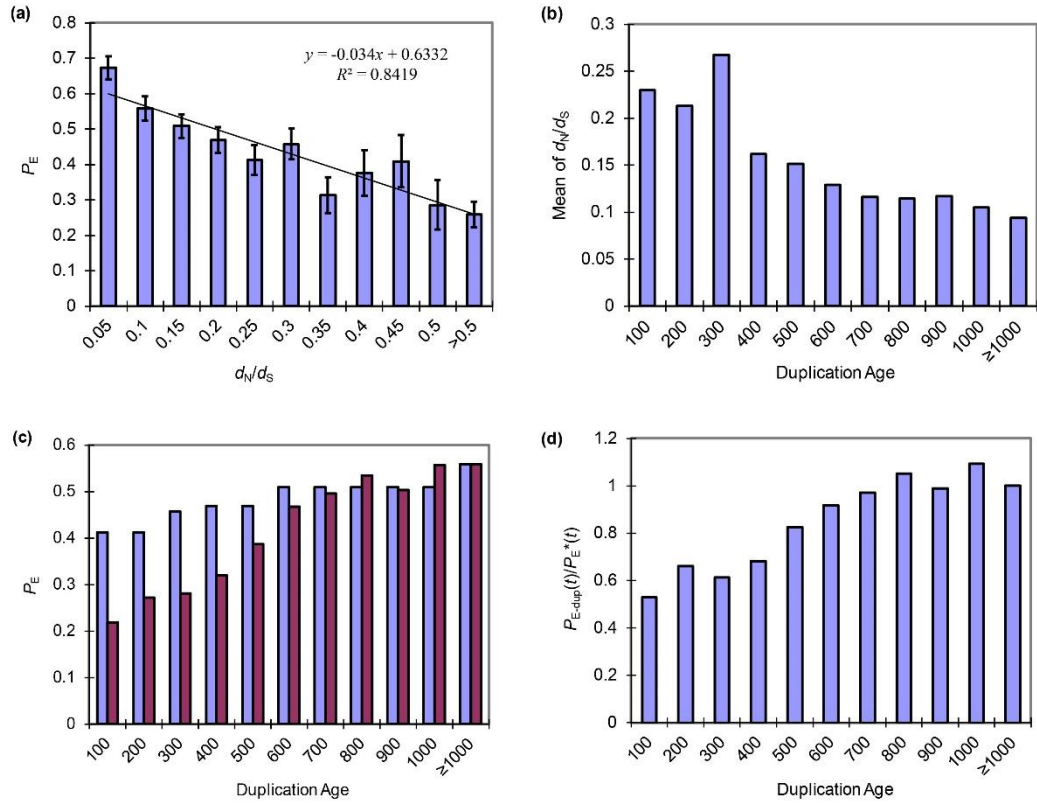


Figure S1. The effect of sequence conservation on the relationship between  $P_E$  and duplication age. The  $d_N/d_S$  ratio of mouse-rat one-to-one orthologous gene pairs was used as gene evolutionary conservation measurement. (a) Relationship between  $P_E$  in singletons and the evolutionary conservation of the gene, measured by the ratio of the nonsynonymous ( $d_N$ ) to synonymous ( $d_S$ ) nucleotide distances between the target gene and its rat ortholog. (b) Mean  $d_N/d_S$  ratio for each age bin of duplicates. (c)  $P_E$  in each age bin of duplicates— $P_E(\text{dup}, t)$  and that of singletons with the same  $d_N/d_S$  ratio— $P_E^*(t)$ . (d) Ratio of  $P_E(\text{dup}, t)$  and  $P_E^*(t)$  in each age bin of duplicates.