



Figure S1. Expected patterns of genomic islands of divergence under different models. **(A)** Model 1: variation in recent gene flow. Gene flow is restricted at island regions, and homogenises the rest of the genome. **(B)** Model 2: ancient balanced polymorphism. Highly diverged haplotypes present before speciation form genomic islands due to lineage sorting. **(C)** Model 3: recent selection without gene flow. In allopatric speciation, selection forms the genomic island at adaptive loci. **(D)** Model 4: ongoing background selection and/or recurrent selective sweeps. Recurrent selection accumulates divergence at genomic regions of low recombination rate. Recurrent selective sweep causes a similar pattern of divergence.