

 (A1)



(A2)



(A3)



(A4)



(A5)



(A6)



(B1)



(B2)



(B3)



(B4)



(B5)

(B6)

**Figure S1.** QQ plots. A1, A2, and A3 are for rare, rare and common, common when sample size is 1000 and=0, respectively. A3, A4, and A5 are for rare, rare and common, common when sample size is 1000 and=0.6, respectively. B1, B2, and B3 are for rare, rare and common, common when sample size is 1600 and=0, respectively. B3, B4, and B5 are for rare, rare and common, common when sample size is 1600 and=0.6, respectively.