

# **Estimating the occurrence of primary ubiquinone deficiency by analysis of large-scale sequencing data**

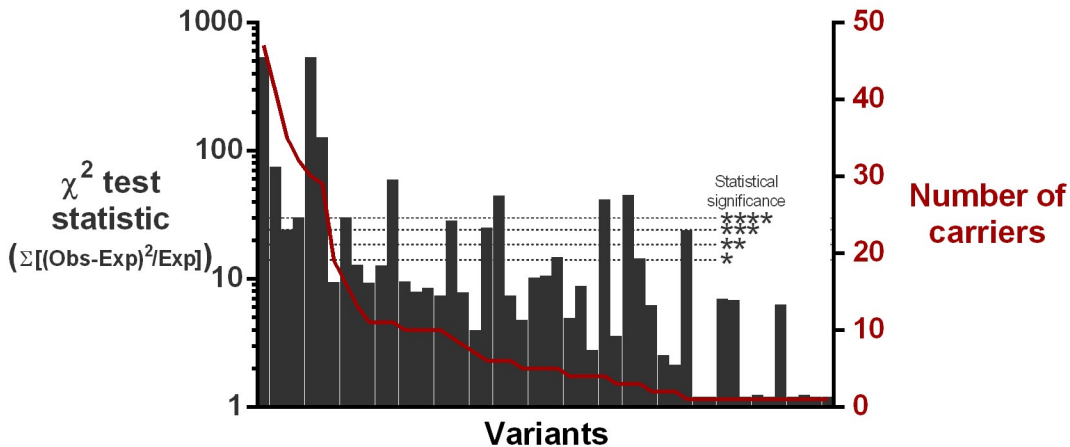
## **Supplemental Figure**

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## Divergence from even population distribution



As a measure of divergence from an expected, even, distribution across populations,  $\chi^2$  test statistics (dark grey) of allele frequencies for each variant are plotted on the left x-axis. The number of carriers for each variant (red) is plotted on the right x-axis.

If variants are evenly distributed within populations (i.e., equal frequencies), then the difference between the observed and expected (based on assumption of equal frequencies) carrier numbers should be minimal and the  $\chi^2$  test statistic will be small. If a variant is present in one or more populations in a frequency much different than the other populations, then  $\chi^2$  will be larger. Variants with fewer carriers (i.e., a smaller sample size) should result in a  $\chi^2$  test with lower statistical power.