

Description of Additional Supplementary Files

File Name: Supplementary Data 1

Description: Demographics of SG10K samples across different ethnic groups

File Name: Supplementary Data 2

Description: Precision and Recall of deletions using different SV calling pipelines using 34 1000G samples with corresponding long read data.

File Name: Supplementary Data 3

Description: Benchmarking duplications in ten 1KG samples using the SG10K-SV workflow

File Name: Supplementary Data 4

Description: Sensitivity and Precision of our pipeline measured using ten 1000Genome project samples

File Name: Supplementary Data 5

Description: Hotspot location detected using the SG10K-SV variants.

File Name: Supplementary Data 6

Description: Distribution of SVs disrupting regulatory regions (ENCODE cCREs) across allele frequency bins.

File Name: Supplementary Data 7

Description: Distribution of SVs disrupting gene centric features across allele frequency bins.

File Name: Supplementary Data 8

Description: Selected 86 events which shows significant F_{st} between ethnic groups.

File Name: Supplementary Data 9

Description: Linkage Disequilibrium R^2 between SV and lead GWAS SNP obtain from the GWAS Catalog. The P-values were obtained from each individual study.