

Samples	Study	Profile	PCR free	Depth	Access
AJ Child (NA24385)	GIAB	PacBio	-	70X	http://jimb.stanford.edu/giab-resources
AJ Father (NA24149)	GIAB	PacBio	-	30X	http://jimb.stanford.edu/giab-resources
AJ Mother (NA24143)	GIAB	PacBio	-	30X	http://jimb.stanford.edu/giab-resources
Chinese Child (HG00514)	PRJEB12236	PacBio	-	70X	ncbi.nlm.nih.gov/sra/ERX1322863
Chinese Father (HG00512)	PRJEB12236	PacBio	-	35X	ncbi.nlm.nih.gov/sra/ERX1322861
Chinese Mother (HG00513)	PRJEB12236	PacBio	-	35X	ncbi.nlm.nih.gov/sra/ERX1322862
AJ Child (NA24385)	GIAB	HiSeq 2500	Y	40X	http://jimb.stanford.edu/giab-resources
AJ Father (NA24149)	GIAB	HiSeq 2500	Y	40X	http://jimb.stanford.edu/giab-resources
AJ Mother (NA24143)	GIAB	HiSeq 2500	Y	40X	http://jimb.stanford.edu/giab-resources
NA12878	GIAB	PacBio	-	70X	http://jimb.stanford.edu/giab-resources
NA12878	GIAB	HiSeq 2500	Y	30X	http://jimb.stanford.edu/giab-resources
150 Individuals of 1KGP	Polaris	HiSeq X	Y	30-40X	ebi.ac.uk/ena/data/view/PRJEB20654
Diabetes WES data	GoT2D	HiSeq 2000	N	82X	dbGaP: phs001095, phs001096, and phs001097

Table S2: Real sequencing data used in tests.