

**Table S5. WCS datasets used in this analysis.**

Target chr(s)	Donor ID	Donor sex	Center code	No. reads	Trace Archive query terms
1	11321	M	SC	606,874	center_project='CHR_1_11321'
1	17109	M	SC	737,140	center_project='CHR_1_17109'
1	07340	F	SC	679,330	center_project='CHR_1_7340'
2	17119	F	WUGSC	912,044	center_name = 'WUGSC' and species_code='HOMO SAPIENS' and (chromosome='CHR02' or chromosome='2') and strategy='WCS'
4	17119	F	WIBR	619,329	center_project='S246'
4-5	17119	F	WIBR	363,729	center_project='S223'
5	17119	F	WIBR	480,263	center_project='S224' or center_project = 'S247'
6	11321	M	SC	561,174	center_project='CHR_6_11321'
6	17119	F	SC	506,469	center_project='CHR_6_17119'
6	07340	F	SC	568,268	center_project='CHR_6_7340'
7	17119	F	WUGSC	311,439	strategy = 'WCS' and center_name = 'WUGSC' and chromosome='7'
8-9	17119	F	WIBR	685,493	center_project='S225' or center_project='S248'
9-12	07340	F	SC	938,978	center_project='CHR_9-12_7340'
13	11321	M	SC	318,804	center_project='CHR_13_11321'
13	17119	F	SC	317,029	center_project='CHR_13_17119'
13	07340	F	SC	348,128	center_project='CHR_13_7340'
14	17119	F	WIBR	353,264	center_project='S226' or center_project='S249'
18	17109	M	WIBR	276,943	center_project='S227' or center_project='S250'
20	10470	M	SC	287,810	seq_lib_id='45079'
20	11321	M	SC	371,611	seq_lib_id='47841' or seq_lib_id='45081'
20	17119	M	SC	264,442	seq_lib_id='45080'
20	07340	F	SC	361,607	seq_lib_id='44340'
21	17119	F	WUGSC	116,714	strategy='WCS' and center_name='WUGSC' and chromosome='21'
22	10470	M	SC	220,600	center_project='CHR_22_10470'
22	11321	M	SC	265,034	center_project='CHR_22_11321'
22	17119	F	SC	202,925	center_project='CHR_22_17119'
22	07340	F	SC	222,795	center_project='CHR_22_7340'
X	10470	M	SC	48,419	center_project='CHR_X_10470'
X	11321	M	SC	394,822	center_project='CHR_X_11321'
X	17119	F	SC	463,386	center_project='CHR_X_17119'
X	07340	F	SC	463,719	center_project='CHR_X_7340'
Y	17109	M	WIBR	96,768	center_project='S228'