

Supplementary Table 14. Optical genome mapping and Nanopore long-read sequencing were compared by the number and length of identified structural variants (SV). Unless otherwise indicated, the DNA was derived from iPSC lines.

N of INS	Mean INS length (\pm SD)	N of DEL	Mean DEL length (\pm SD)	N of INV	Mean INV length (\pm SD)	N of DUP	Mean DUP length (\pm SD)	total SV
SFC831-03-05, Optical genome mapping								
139	3227 (\pm 6160)	91	5546 (\pm 13550)	0	NA	4	555300 (\pm 780273)	234
SFC831-03-05, Nanopore Sequencing								
3008	2000 (\pm 2721)	2066	653855 (\pm 8342987)	50	31532040 (\pm 36977885)	17	23533631 (\pm 42522638)	5141
SFC827-03-02, Optical genome mapping								
128	4970 (\pm 12945)	90	50051 (\pm 421729)	0	NA	5	1143750 (\pm 1937702)	223
SFC827-03-02, Nanopore Sequencing								
997	7393 (\pm 5906)	65	31148 (\pm 249497)	6	1968511 (\pm 1547190)	8	1309265 (\pm 1049652)	1076
iPS-L-3034, Optical genome mapping								
147	2604 (\pm 3829)	80	17342 (\pm 67765)	1	15530	1	192345	229
L-3034 (Fibroblast line), Optical genome mapping								
156	3069 (\pm 7912)	76	15415 (\pm 64830)	0	NA	0	NA	232
iPS-L-3034, Nanopore Sequencing								
1796	1461 (\pm 2536)	1565	466028 (\pm 6086730)	26	37004333 (\pm 48137264)	3	9745447 (\pm 16862528)	3390
iPS-L-3244, Optical genome mapping								
149	3563 (\pm 9415)	91	5937 (\pm 11515)	0	NA	0	NA	240
iPS-L-3244, Nanopore Sequencing								
2610	2855 (\pm 4597)	1780	94198 (\pm 2820108)	15	35708685 (\pm 51677059)	3	16188231 (\pm 28020535)	4408
iPS-L-10312, Optical genome mapping								
143	4017 (\pm 11004)	95	5745 (\pm 12074)	0	NA	0	NA	238
iPS-L-10312, Nanopore Sequencing								
3063	2772 (\pm 3355)	1852	368102 (\pm 5018483)	46	40761950 (\pm 46692210)	13	20188411 (\pm 30043006)	4974

N = Number of individual SV types; INS = Insertion; DEL = Deletion; INV = Inversion; DUP = Duplication
The mean length of the SV types and the corresponding SD are displayed in bp.