

Supplementary Table 2. Exome Stats

Group	Data_Sample	CapKit	Total_reads	Total_yield	Average_read_length
Meta	2003-159	TruSeq	71806624	7252469024	101
Meta	2003-186	TruSeq	71431568	7214588368	101
Meta	2003-256	TruSeq	67746608	6842407408	101
Meta	2003-265	TruSeq	107289452	10836234652	101
Meta	2006-223	TruSeq	124465416	12571007016	101
Meta	2006-235	TruSeq	42917684	4334686084	101
Meta	2006-267	TruSeq	72791540	7351945540	101
Meta	2006-49	TruSeq	63355022	6398857222	101
Meta	2006-56	TruSeq	120148366	12134984966	101
Meta	2006-72	TruSeq	95110724	9606183124	101
Meta	2008-134	TruSeq	121307940	12252101940	101
Meta	2008-56	TruSeq	139524402	14091964602	101
Meta	2012	TruSeq	67694974	6837192374	101
Meta	2186	TruSeq	75429684	7618398084	101
Meta	9827	TruSeq	96312624	9727575024	101
Meta	99143	TruSeq	95297328	9625030128	101
Meta	99150	TruSeq	89868026	9076670626	101
Meta	9970	TruSeq	104601038	10564704838	101
Meta	9984	TruSeq	84835320	8568367320	101
Meta	D2129	TruSeq	71411018	7212512818	101
Meta	D2332	TruSeq	149217302	15070947502	101
Meta	D2370	TruSeq	68005646	6868570246	101
Non-Meta	2003-237	TruSeq	66747184	6741465584	101
Non-Meta	2003-303	TruSeq	274294734	27703768134	101
Non-Meta	2006-149	TruSeq	71203584	7191561984	101
Non-Meta	2006-16	TruSeq	63959354	6459894754	101
Non-Meta	2006-173	TruSeq	65060364	6571096764	101
Non-Meta	2006-174	TruSeq	75272122	7602484322	101
Non-Meta	2006-187	TruSeq	66586432	6725229632	101
Non-Meta	2006-21	TruSeq	66671754	6733847154	101
Non-Meta	2006-225	TruSeq	142889558	14431845358	101
Non-Meta	2006-241	TruSeq	66686306	6735316906	101
Non-Meta	2006-313	TruSeq	118802790	11999081790	101
Non-Meta	2006-315	TruSeq	92977146	9390691746	101
Non-Meta	2006-316	TruSeq	86935254	8780460654	101
Non-Meta	2006-38	TruSeq	62203378	6282541178	101
Non-Meta	2006-82	TruSeq	65404370	6605841370	101
Non-Meta	2051	TruSeq	63903874	6454291274	101
Non-Meta	2060	TruSeq	74434504	7517884904	101
Non-Meta	2062	TruSeq	60625852	6123211052	101
Non-Meta	2083	TruSeq	63221230	6385344230	101
Non-Meta	2107	TruSeq	65908270	6656735270	101
Non-Meta	2142	TruSeq	68623874	6931011274	101
Non-Meta	2146	TruSeq	70653476	7136001076	101

Non-Meta	2150	TruSeq	65283598	6593643398	101
Non-Meta	2172	TruSeq	115135026	11628637626	101
Non-Meta	2183	TruSeq	95016516	9596668116	101
Non-Meta	2188	TruSeq	68920978	6961018778	101
Non-Meta	2189	TruSeq	72205654	7292771054	101
Non-Meta	2194	TruSeq	68658006	6934458606	101
Non-Meta	2195	TruSeq	97252636	9822516236	101
Non-Meta	2198	TruSeq	71723840	7244107840	101
Non-Meta	2202	TruSeq	69433814	7012815214	101
Non-Meta	2214	TruSeq	248051486	25053200086	101
Non-Meta	2222	TruSeq	61514562	6212970762	101
Non-Meta	2234	TruSeq	63535838	6417119638	101
Non-Meta	2242-2	TruSeq	76047250	7680772250	101
Non-Meta	2243	TruSeq	67180240	6785204240	101
Non-Meta	2281	TruSeq	61334316	6194765916	101
Non-Meta	2304	TruSeq	67641824	6831824224	101
Non-Meta	2317	TruSeq	72207034	7292910434	101
Non-Meta	2357	TruSeq	69014828	6970497628	101
Non-Meta	2358	TruSeq	60245342	6084779542	101
Non-Meta	2359	TruSeq	67930688	6860999488	101
Non-Meta	2378	TruSeq	66850376	6751887976	101
Non-Meta	2379	TruSeq	78776448	7956421248	101
Non-Meta	9653	TruSeq	100237252	10123962452	101
Non-Meta	9829	TruSeq	102951148	10398065948	101
Non-Meta	9964	TruSeq	107980818	10906062618	101
Non-Meta	D2006-84	TruSeq	109043482	11013391682	101
Non-Meta	D2008-10	TruSeq	65332634	6598596034	101
Non-Meta	D2008-112	TruSeq	62429146	6305343746	101
Non-Meta	D2008-118	TruSeq	69083774	6977461174	101
Non-Meta	D2096	TruSeq	102940120	10396952120	101
Non-Meta	D2224	TruSeq	103143650	10417508650	101
Non-Meta	D2247	TruSeq	69672480	7036920480	101
Non-Meta	D2268	TruSeq	66455362	6711991562	101
Non-Meta	D2303	TruSeq	82447696	8327217296	101

Target_regions	Average_throughput_dept h_of_target_regions	Initial_mappable_reads_map ped_to_human_genome
62085286	117	71806624
62085286	116	71431568
62085286	110	67746608
62085286	175	107147652
62085286	203	124465416
62085286	70	42917684
62085286	118	72791540
62085286	103	63355022
62085286	196	119946126
62085286	155	94936864
62085286	197	121133716
62085286	227	139310920
62085286	110	67694974
62085286	123	75429684
62085286	157	96152000
62085286	155	95176234
62085286	146	89727332
62085286	170	104365584
62085286	138	84728156
62085286	116	71411018
62085286	243	149217302
62085286	111	68005646
62085286	109	66747184
62085286	446	273613768
62085286	116	71203584
62085286	104	63959354
62085286	106	65060364
62085286	123	75272122
62085286	108	66586432
62085286	109	66671754
62085286	233	142889558
62085286	109	66686306
62085286	193	118802790
62085286	151	92977146
62085286	141	86935254
62085286	101	62203378
62085286	106	65404370
62085286	104	63903874
62085286	121	74434504
62085286	99	60625852
62085286	103	63221230
62085286	107	65908270
62085286	112	68623874
62085286	115	70653476

62085286	106	65283598
62085286	187	115135026
62085286	155	95016516
62085286	112	68920978
62085286	118	72205654
62085286	112	68658006
62085286	158	97252636
62085286	117	71723840
62085286	113	69433814
62085286	404	242636962
62085286	100	61514562
62085286	103	63535838
62085286	124	76047250
62085286	109	67180240
62085286	100	61334316
62085286	110	67641824
62085286	118	72207034
62085286	112	69014828
62085286	98	60245342
62085286	111	67930688
62085286	109	66850376
62085286	128	78776448
62085286	163	100022238
62085286	168	102781852
62085286	176	107810456
62085286	177	109043482
62085286	106	65332634
62085286	102	62429146
62085286	112	69083774
62085286	168	102940120
62085286	168	102981652
62085286	113	69672480
62085286	108	66455362
62085286	134	82447696

Initial_mappable_reads_out_of_total_reads	Non_redundant_reads_deduplicated_by_Picard_tools	Non_redundant_reads_out_of_initial_mappable_reads
100.00%	58967621	82.10%
100.00%	57896280	81.10%
100.00%	55321621	81.70%
99.90%	71362504	66.60%
100.00%	104784962	84.20%
100.00%	41104537	95.80%
100.00%	61777104	84.90%
100.00%	53116170	83.80%
99.80%	86354030	72.00%
99.80%	59198076	62.40%
99.90%	86234730	71.20%
99.80%	82611050	59.30%
100.00%	53571890	79.10%
100.00%	57253340	75.90%
99.80%	51841255	53.90%
99.90%	55806455	58.60%
99.80%	54705247	61.00%
99.80%	45503157	43.60%
99.90%	55293993	65.30%
100.00%	59659664	83.50%
100.00%	86263490	57.80%
100.00%	56422986	83.00%
100.00%	55542068	83.20%
99.80%	111774834	40.90%
100.00%	62725076	88.10%
100.00%	52439080	82.00%
100.00%	56220447	86.40%
100.00%	66453390	88.30%
100.00%	54425490	81.70%
100.00%	56034326	84.00%
100.00%	115626512	80.90%
100.00%	55196703	82.80%
100.00%	90197302	75.90%
100.00%	74595841	80.20%
100.00%	57010800	65.60%
100.00%	51666791	83.10%
100.00%	55355274	84.60%
100.00%	48829548	76.40%
100.00%	59573216	80.00%
100.00%	48082371	79.30%
100.00%	51919557	82.10%
100.00%	54342918	82.50%
100.00%	55393806	80.70%
100.00%	56937424	80.60%

100.00%	54261428	83.10%
100.00%	90394531	78.50%
100.00%	71135567	74.90%
100.00%	52268137	75.80%
100.00%	54993338	76.20%
100.00%	52817742	76.90%
100.00%	64885970	66.70%
100.00%	58268213	81.20%
100.00%	56630049	81.60%
97.80%	148111821	61.00%
100.00%	52455449	85.30%
100.00%	51005760	80.30%
100.00%	47549637	62.50%
100.00%	51979994	77.40%
100.00%	47377953	77.20%
100.00%	54955914	81.20%
100.00%	56655839	78.50%
100.00%	56805892	82.30%
100.00%	47213767	78.40%
100.00%	56767537	83.60%
100.00%	56372463	84.30%
100.00%	67291732	85.40%
99.80%	60698755	60.70%
99.80%	66145224	64.40%
99.80%	73292368	68.00%
100.00%	76913901	70.50%
100.00%	54410781	83.30%
100.00%	46117390	73.90%
100.00%	50948113	73.70%
100.00%	86752827	84.30%
99.80%	69025150	67.00%
100.00%	50849130	73.00%
100.00%	47563993	71.60%
100.00%	56541269	68.60%

Non_redundant_unique_reads_uniquely_mapped_to_human_genome	Non_redundant_unique_reads_out_of_non_redundant_reads
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52494793	89.00%
50985791	88.10%
49293503	89.10%
64413236	90.30%
90107868	86.00%
36893695	89.80%
55640956	90.10%
47346770	89.10%
77614449	89.90%
53320792	90.10%
77351250	89.70%
74037214	89.60%
47517133	88.70%
50552982	88.30%
46892833	90.50%
50471114	90.40%
49337731	90.20%
40393929	88.80%
49986337	90.40%
53549048	89.80%
76956519	89.20%
50313053	89.20%
49540391	89.20%
100944670	90.30%
56483829	90.00%
46974148	89.60%
50309918	89.50%
59830843	90.00%
48534923	89.20%
50047678	89.30%
94594270	81.80%
49616058	89.90%
80609175	89.40%
66265188	88.80%
50911752	89.30%
46094961	89.20%
49497253	89.40%
43301027	88.70%
53510030	89.80%
42919961	89.30%
46482467	89.50%
48654249	89.50%
49405923	89.20%
50331522	88.40%

48436497	89.30%
80481847	89.00%
63459530	89.20%
46163311	88.30%
48547479	88.30%
46855564	88.70%
57437212	88.50%
51974105	89.20%
50303206	88.80%
131892657	89.00%
46740014	89.10%
45354869	88.90%
42977803	90.40%
46153662	88.80%
42089573	88.80%
48746166	88.70%
50456906	89.10%
50963607	89.70%
42045470	89.10%
50819835	89.50%
50562732	89.70%
60351115	89.70%
53953116	88.90%
59231881	89.50%
64919145	88.60%
68984433	89.70%
48683466	89.50%
41709590	90.40%
45375896	89.10%
78109467	90.00%
62011784	89.80%
45247240	89.00%
42154562	88.60%
50054713	88.50%

On_target_reads_reads_mapped_to_target_regions	On_target_reads_out_of_non_redundant_unique_reads	Coverage_of_target_regions_more_than_1X
37199895	70.90%	93.70%
35511032	69.60%	94.10%
33568115	68.10%	94.70%
45194707	70.20%	94.20%
59425675	65.90%	97.60%
25731228	69.70%	94.10%
40388706	72.60%	94.50%
32600009	68.90%	94.40%
52314392	67.40%	94.50%
36136854	67.80%	94.70%
53585938	69.30%	94.30%
51826599	70.00%	94.30%
33160465	69.80%	94.50%
35367885	70.00%	94.40%
32006636	68.30%	94.40%
36408961	72.10%	93.70%
34450397	69.80%	94.20%
25640813	63.50%	94.60%
35536282	71.10%	93.80%
39838718	74.40%	93.80%
55376274	72.00%	94.60%
35157235	69.90%	94.60%
33716613	68.10%	94.60%
72072972	71.40%	95.40%
38939420	68.90%	94.90%
32687659	69.60%	94.30%
34027480	67.60%	94.90%
41466171	69.30%	95.00%
33624275	69.30%	94.40%
34669601	69.30%	94.40%
61262472	64.80%	97.60%
36576680	73.70%	93.80%
53767295	66.70%	95.20%
47013530	70.90%	95.00%
35042637	68.80%	94.10%
31827470	69.00%	94.30%
33817465	68.30%	94.50%
30241420	69.80%	94.50%
37665803	70.40%	94.50%
29032832	67.60%	94.80%
32114865	69.10%	94.60%
33744199	69.40%	94.40%
34474753	69.80%	94.70%
35033123	69.60%	94.90%

33373283	68.90%	94.60%
55438623	68.90%	95.10%
44115659	69.50%	94.10%
30780094	66.70%	95.00%
34107321	70.30%	94.60%
31876178	68.00%	94.70%
40099907	69.80%	94.70%
34831867	67.00%	94.70%
34627876	68.80%	94.60%
95497833	72.40%	97.80%
31684332	67.80%	94.50%
31390535	69.20%	94.30%
30613838	71.20%	93.90%
30990271	67.10%	94.80%
30118220	71.60%	94.00%
33112214	67.90%	94.60%
33035836	65.50%	95.00%
35537586	69.70%	94.40%
29194220	69.40%	94.10%
37114963	73.00%	93.90%
35821160	70.80%	94.10%
41939328	69.50%	94.60%
34338754	63.60%	94.80%
39344056	66.40%	94.40%
42388855	65.30%	94.70%
50778466	73.60%	94.60%
34985081	71.90%	94.40%
28569972	68.50%	94.60%
32898431	72.50%	94.40%
57051860	73.00%	94.60%
42514381	68.60%	94.90%
30691984	67.80%	94.10%
30004029	71.20%	93.70%
37151771	74.20%	94.30%

Number_of_on_target_genotypes_more_than_1X	Coverage_of_target_regions_more_than_10X
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58198378	83.90%
58413120	84.90%
58792872	86.00%
58505981	88.30%
60587563	91.70%
58418725	82.90%
58668633	87.20%
58583939	85.00%
58686853	88.40%
58778533	87.70%
58559587	88.80%
58567749	88.80%
58641503	85.80%
58625976	85.90%
58601592	85.10%
58194066	86.90%
58492663	86.20%
58744210	83.30%
58249831	86.90%
58256969	85.60%
58760103	89.00%
58732834	86.60%
58739602	86.00%
59234020	91.90%
58909865	87.40%
58519214	85.00%
58904569	86.70%
58955347	87.50%
58620139	86.50%
58605537	86.00%
60572499	92.60%
58227825	85.40%
59076695	89.10%
58968028	89.30%
58446590	85.70%
58515954	84.70%
58663173	86.10%
58642622	86.40%
58691213	87.00%
58839935	84.50%
58746433	85.80%
58594201	86.00%
58765828	87.10%
58918881	87.30%

58753045	86.00%
59055136	89.80%
58419000	87.20%
59012015	85.60%
58761357	86.20%
58810588	85.60%
58811244	87.60%
58807862	85.90%
58736130	86.20%
60739184	94.70%
58656961	85.20%
58562734	85.10%
58321714	85.90%
58886058	84.80%
58361200	84.40%
58710989	85.40%
58971278	86.20%
58630592	86.50%
58431128	84.90%
58312074	85.90%
58415332	86.20%
58722461	87.50%
58850959	86.70%
58584520	86.70%
58790884	87.30%
58712432	88.70%
58609894	85.70%
58748097	84.90%
58634698	87.10%
58713018	88.80%
58919725	88.40%
58442553	82.70%
58180252	82.50%
58526066	87.90%

Number_of_on_target_genotypes_more_than_10X	Mean_depth_of_target_regions	Number_of_SNPs
52061681	47.1	67055
52703299	44.9	70909
53368582	43.4	73319
54827338	59	71346
56925801	77.9	90457
51468425	33.6	79632
54148389	52.3	78017
52774095	42.1	71657
54906530	67.1	69194
54460204	47.4	73204
55112637	68.9	72483
55147605	66.7	75002
53277630	42.7	71793
53347417	45.3	71276
52826315	42.1	70166
53939564	47.5	72804
53545811	45.2	71591
51739782	33.3	71030
53958549	46.5	72716
53143538	51.3	67274
55249168	71.2	76284
53740596	45.3	71756
53408516	43.6	72619
57029153	93.8	77913
54249074	51.2	87164
52783396	42.3	67522
53836101	44.8	83655
54345688	54.5	89498
53710150	43.3	72555
53385200	44.8	72053
57466609	80.8	90825
53003054	46.9	71532
55340813	68.3	73982
55444978	60	82059
53186979	45.6	72199
52605303	41.2	72086
53476868	43.8	72840
53613701	38.9	72522
54014596	48.8	71484
52431359	37.9	65435
53269418	41.8	73532
53419634	43.9	73528
54091652	44.2	73079
54170210	44.9	73727

53423532	43	72851
55726405	71.5	76841
54136504	57.4	74019
53118680	39.6	71569
53504049	43.7	73627
53136276	41	71671
54390499	51.4	73890
53323601	44.8	72705
53507652	44.3	72712
58790009	126.9	83956
52873317	40.6	71085
52833652	40.2	72889
53343554	39.8	72484
52671202	40.1	72041
52427879	38.6	71676
53042383	42.8	72616
53497566	42.8	72730
53723497	46	67871
52689095	37.8	71959
53302732	47.8	71019
53541866	46.4	71978
54349328	54.2	74719
53847938	44.7	72102
53856624	50.5	71163
54225799	54.8	71978
55090401	65.2	75535
53177640	45.1	69234
52714915	36.9	66329
54087378	42.2	75138
55155683	73.8	75396
54892642	55	74907
51332080	39.5	71556
51210079	38.2	69921
54596727	47.8	74022

Number_of_coding_SNPs	Number_of_synonymous_S NPs	Number_of_nonsynonymous_S NPs
18696	9643	8576
19738	10132	9112
20169	10367	9266
19183	9854	8861
23967	12527	10848
23237	12035	10630
21601	11290	9799
20089	10296	9278
18560	9510	8536
19866	10186	9165
19363	9969	8914
20032	10330	9207
19771	10186	9071
19600	10108	8979
19200	9889	8810
19664	10263	8930
19537	10140	8928
19836	10183	9169
19619	10075	9046
18605	9522	8624
20136	10448	9213
19672	10148	9016
19967	10249	9213
20020	10478	9057
24476	12779	11103
18739	9730	8518
23758	12271	10907
25066	13020	11436
19975	10345	9143
19892	10231	9127
23882	12376	10883
19861	10268	9059
19682	10284	8917
22617	11659	10368
19776	10224	9049
20002	10296	9186
20002	10300	9190
19994	10345	9122
19597	10090	9001
18188	9332	8378
20444	10531	9393
20205	10409	9266
20179	10331	9349
20237	10517	9189

20241	10424	9264
20442	10646	9276
20167	10509	9162
19785	10210	9060
20297	10455	9310
19959	10304	9136
20085	10430	9155
20079	10340	9189
19891	10194	9173
20551	10733	9296
19655	10189	8974
20183	10374	9287
20089	10387	9213
19875	10209	9157
20112	10457	9187
19940	10347	9074
20040	10298	9201
18447	9576	8395
19901	10238	9146
19578	10105	8965
19805	10243	9066
20084	10425	9172
19559	10087	8953
19310	9924	8897
19394	10002	8886
20390	10522	9319
18939	9711	8736
18244	9292	8449
20817	10725	9547
20251	10410	9339
20187	10479	9217
20063	10283	9288
19888	10234	9160
20501	10530	9459

Number_of_indels	Number_of_coding_indels
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6847	342
6928	348
7442	351
7885	377
9552	532
7937	434
8156	415
7142	365
7742	376
7942	371
7800	363
8081	364
7273	361
7114	386
7604	348
7753	351
7661	381
7498	353
7747	357
7085	351
7983	364
7373	367
7383	360
8801	407
8824	445
7189	344
8469	411
8958	445
7339	344
7333	365
10225	595
7071	369
7863	384
8222	423
7332	337
7336	368
7306	359
7348	382
7461	378
7034	343
7443	390
7476	373
7275	375
7347	375

7243	377
7680	380
7375	358
7070	368
7148	379
7142	348
7479	361
7287	374
7241	370
9218	464
7046	365
7185	354
7505	370
7350	355
7005	355
7237	342
7323	361
7208	353
7266	367
7037	371
7329	361
7574	368
7666	361
7641	369
7711	355
7737	405
7255	350
7087	339
7735	402
7854	375
7888	370
7084	331
6744	326
7415	379