

# 108 candidate SNPs with average heterozygosity $\geq 0.4$ and Fst(31 pops) $< 0.06$

## Provisional List as of Summer 2007

The “project source” classifies SNPs as originating either from the “SNPforID” project(Sanchez et al., 2006 \*\*) or from various Kidd Lab projects: “Low-Fst-best”—the set of best 40 SNPs in Pakstis et al. (2007)\*; “Low-Fst-other”—other SNPs identified in NIJ sponsored research in addition to the best 40 SNPs; “Kidd-Other”—SNPs from non-NIJ lab projects that meet the criteria for inclusion.

The SNPs are sorted by the Fst value based on 31 population samples.

The information here was included in figures presented in posters at recent scientific meetings (See footnote †).

Rank	Fst 31p	Project Source	TaqMan ID	dbSNP rs#	Het(31)	Fst(31p)	Het(40p)	Fst(40p)	Chr	Nucleotide Position (Map Build 36.2)
1		LowFst-best	C_2450075_10	rs10488710	0.459	0.0127	0.441	0.0245	11	114,712,386
2		LowFst-best	C_2508482_10	rs1523537	0.482	0.0143	0.472	0.0424	20	50,729,569
3		LowFst-best	C_3004178_10	rs321198	0.479	0.0158	0.457	0.0557	7	136,680,378
4		LowFst-other	C_2223821_1	rs453609	0.482	0.0159	0.461	0.0642	6	145,854,025
5		LowFst-best	C_8263011_10	rs279844	0.491	0.0174	0.485	0.0302	4	46,024,412
6		LowFst-best	C_2223883_10	rs447818	0.488	0.0198	0.471	0.0578	6	145,910,689
7		LowFst-best	C_11673733_10	rs1821380	0.472	0.0199	0.464	0.0423	15	37,100,694
8		LowFst-best	C_2140539_10	rs1358856	0.486	0.0209	0.473	0.0420	6	123,936,677
9		LowFst-other	C_3070291_10	rs18318	0.419	0.0211	0.403	0.0946	5	55,801,915
10		LowFst-best	C_1817429_10	rs1336071	0.483	0.0211	0.472	0.0451	6	94,593,976
11		LowFst-best	C_1256256_1	rs2272998	0.481	0.0213	0.468	0.0471	6	148,803,149
12		LowFst-other	C_381537_10	rs4524490	0.445	0.0221	0.423	0.0773	5	77,558,348
13		Kidd-Other	C_11907549_1	rs1872575	0.489	0.0222	0.469	0.0587	3	115,287,669
14		LowFst-best	C_411273_10	rs2503107	0.475	0.0229	0.454	0.0575	6	127,505,069
15		LowFst-best	C_3254784_10	rs740598	0.472	0.0236	0.463	0.0403	10	118,496,889
16		LowFst-best	C_2997607_10	rs445251	0.463	0.0237	0.463	0.0405	20	15,072,933
17		LowFst-best	C_1006721_1	rs560681	0.438	0.0240	0.434	0.0345	1	159,053,294
18		LowFst-best	C_2073009_10	rs1109037	0.486	0.0250	0.467	0.0575	2	10,003,173
19		LowFst-best	C_11522503_1	rs2073383	0.466	0.0257	0.452	0.0463	22	22,132,171
20		LowFst-best	C_11245682_10	rs6811238	0.487	0.0257	0.485	0.0305	4	169,900,190
21		LowFst-best	C_3153696a_10	rs338882	0.485	0.0261	0.467	0.0563	5	178,623,331
22		LowFst-best	C_25749280_10	rs6444724	0.479	0.0263	0.468	0.0446	3	194,690,074
23		Kidd-Other	C_1570295_	rs1027895	0.441	0.0269	0.431	0.0540	17	43,865,696
24		LowFst-best	C_7538108_10	rs1410059	0.485	0.0269	0.471	0.0542	10	97,162,585
25		Kidd-Other	C_26227271_	rs3744163	0.458	0.0271	0.431	0.0479	17	78,333,148
26		LowFst-best	C_3206279_1	rs2567608	0.486	0.0275	0.475	0.0437	20	22,965,082
27		LowFst-best	C_342791_10	rs7520386	0.485	0.0278	0.477	0.0452	1	14,027,989

28	LowFst-best	C__2049946_10	rs10092491	0.463	0.0287	0.456	0.0387	8	28,466,991
29	LowFst-other	C__952907_10	rs1961171	0.474	0.0288	0.445	0.0720	1	119,079,374
30	LowFst-best	C__2572254_10	rs1019029	0.483	0.0288	0.472	0.0454	7	13,860,801
31	LowFst-best	C__3032822_1_	rs315791	0.483	0.0296	0.471	0.0581	5	169,668,498
32	LowFst-best	C__9371416_10	rs13218440	0.467	0.0304	0.457	0.0466	6	12,167,940
33	LowFst-best	C__1371205_10	rs9951171	0.481	0.0305	0.474	0.0443	18	9,739,879
34	Kidd-Other	C__1605841_	rs10500617	0.417	0.0310	0.412	0.0456	11	5,055,969
35	LowFst-best	C__1152009_10	rs1478829	0.481	0.0310	0.474	0.0467	6	120,602,393
36	LowFst-best	C__2556113_10	rs13182883	0.469	0.0313	0.471	0.0333	5	136,661,237
37	LowFst-best	C__2822618_10	rs3780962	0.484	0.0318	0.475	0.0488	10	17,233,352
38	Kidd-Other	C__11631183_	rs2175957	0.429	0.0328	0.432	0.0557	17	38,540,348
39	Kidd-Other	C__1452175_	rs1498553	0.479	0.0330	0.476	0.0452	11	5,665,604
40	Kidd-Other	C__2539253_	rs9606186	0.461	0.0332	0.435	0.0565	22	18,300,359
41	LowFst-best	C__1619935_1_	rs1058083	0.460	0.0333	0.464	0.0317	13	98,836,234
42	LowFst-other	C__29350221_10	rs7883376	0.483	0.0333	0.464	0.0718	X,Y	597,349
43	Kidd-Other	C__7968314_10	rs8078417	0.419	0.0334	0.404	0.0413	17	78,055,224
44	LowFst-other	C__611046_10	rs722290	0.482	0.0336	0.468	0.0607	14	52,286,473
45	LowFst-best	C__11887110_1_	rs987640	0.483	0.0343	0.476	0.0475	22	31,889,508
46	Kidd-Other	C__2714437_	rs521861	0.481	0.0344	0.475	0.0500	18	45,625,012
47	SNPforID	C__29375514_	rs8037429	0.483	0.0344	0.463	0.0705	15	51,404,201
48	LowFst-other	C__1760747_10	rs4770456	0.459	0.0345	0.445	0.0625	13	22,963,424
49	LowFst-best	C__1880371_10	rs13134862	0.463	0.0346	0.456	0.0537	4	76,644,920
50	LowFst-best	C__7428940_10	rs1554472	0.482	0.0351	0.471	0.0572	4	157,709,356
51	LowFst-best	C__1995608_10	rs7704770	0.457	0.0354	0.450	0.0578	5	159,420,531
52	Kidd-Other	C__1797119_10	rs9546538	0.411	0.0361	0.424	0.0409	13	83,354,736
53	Kidd-Other	E_rs8070085_10	rs8070085	0.427	0.0362	0.433	0.0511	17	38,595,510
54	LowFst-best	C__1276208_10	rs12997453	0.446	0.0363	0.445	0.0475	2	182,121,504
55	LowFst-other	C__95000_10	rs17034643	0.439	0.0373	0.433	0.0696	1	10,254,689
56	LowFst-other	C__30057969_10	rs7553228	0.439	0.0374	0.433	0.0709	1	10,273,025
57	SNPforID	C__7698393_	rs901398	0.450	0.0375	0.440	0.0551	11	11,052,797
58	LowFst-other	C__1820356_10	rs9389815	0.472	0.0378	0.447	0.0728	6	140,987,071
59	LowFst-best	E_rs7205345_10	rs7205345	0.477	0.0379	0.469	0.0551	16	7,460,255
60	Kidd-Other	C__19853_	rs689512	0.445	0.0384	0.423	0.0511	17	78,308,991
61	Kidd-Other	C__7477802_	rs1004357	0.413	0.0388	0.408	0.0578	17	39,047,052
62	LowFst-best	C__1636106a_10	rs6591147	0.458	0.0388	0.449	0.0585	11	105,418,194
63	LowFst-other	C__2812297_10	rs1884478	0.479	0.0388	0.464	0.0721	6	85,645,351
64	LowFst-other	C__1457224_10	rs2312183	0.479	0.0396	0.467	0.0655	5	155,834,155
65	Kidd-Other	C__3285337_	rs1736442	0.447	0.0398	0.437	0.0487	18	53,376,775
66	LowFst-other	C__8737881_1_	rs778596	0.476	0.0399	0.462	0.0676	5	140,017,456
67	Kidd-Other	C__1605842_	rs10768550	0.427	0.0400	0.414	0.0583	11	5,055,290
68	LowFst-best	C__2515223_10	rs214955	0.480	0.0400	0.475	0.0491	6	152,739,399
69	Kidd-Other	C__3080506_	rs2292972	0.443	0.0404	0.422	0.0535	17	78,359,077
70	LowFst-other	C__329523_10	rs2057076	0.447	0.0404	0.433	0.0686	20	49,668,408
71	SNPforID	C__7539584_	rs891700	0.478	0.0405	0.470	0.0571	1	237,948,549

72	LowFst-best	C____105475_10	rs7229946	0.460	0.0407	0.464	0.0426	18	20,992,999
73	LowFst-other	C____1074815_10	rs648384	0.476	0.0407	0.463	0.0678	11	116,833,910
74	LowFst-other	E____rs4264986_10	rs4264986	0.479	0.0409	0.464	0.0713	5	139,973,450
75	LowFst-other	C____1263225_10	rs1985835	0.469	0.0415	0.465	0.0630	20	60,925,204
76	LowFst-other	C____7721226_10	rs1533499	0.449	0.0419	0.445	0.0699	3	142,979,664
77	Kidd-Other	C____2539254_	rs5746846	0.474	0.0427	0.463	0.0536	22	18,300,646
78	LowFst-other	C____1852759_10	rs9863680	0.478	0.0428	0.467	0.0657	3	189,441,783
79	LowFst-other	C____16112978_10	rs2812148	0.459	0.0432	0.454	0.0695	6	67,188,546
80	Kidd-Other	C____11338582_	rs2255301	0.461	0.0437	0.462	0.0587	12	6,779,703
81	LowFst-other	C____709076_10	rs538558	0.444	0.0451	0.424	0.0870	7	121,724,673
82	SNPforID	C____11989432_10	rs2046361	0.466	0.0453	0.459	0.0598	4	10,578,157
83	Kidd-Other	C____2350908_1_	rs615942	0.477	0.0455	0.464	0.0709	17	37,968,330
84	Kidd-Other	C____2184724_	rs2269355	0.477	0.0456	0.471	0.0565	12	6,816,175
85	LowFst-other	C____28038231_10	rs4772278	0.464	0.0472	0.441	0.0794	13	99,732,276
86	LowFst-best	C____7459903_10	rs985492	0.472	0.0479	0.468	0.0594	18	27,565,032
87	SNPforID	C____2120263_	rs1454361	0.469	0.0481	0.444	0.1016	14	24,920,672
88	Kidd-Other	C____1121246_10	rs747039	0.454	0.0486	0.430	0.0939	17	44,761,912
89	Kidd-Other	C____1274218_	rs12480506	0.413	0.0492	0.406	0.0506	20	16,189,416
90	Kidd-Other	C____11887824_10	rs2193033	0.475	0.0496	0.456	0.0853	17	36,432,462
91	Kidd-Other	C____2533651_10	rs732612	0.475	0.0496	0.454	0.0927	8	42,168,525
92	LowFst-other	C____9114654_10	rs7549293	0.452	0.0503	0.430	0.0734	1	203,578,903
93	Kidd-Other	C____1310541_10	rs11847557	0.469	0.0506	0.461	0.0695	14	90,577,236
94	LowFst-other	C____234618_10	rs4313343	0.449	0.0510	0.437	0.0837	1	24,281,001
95	LowFst-other	C____2446695_1_	rs9620391	0.440	0.0516	0.422	0.0806	22	23,205,123
96	LowFst-other	C____516837_10	rs6500926	0.471	0.0522	0.442	0.1001	16	7,201,855
97	SNPforID	C____8902740_	rs964681	0.423	0.0523	0.411	0.0748	10	132,588,409
98	LowFst-other	C____11158875_10	rs2055613	0.453	0.0539	0.443	0.0635	5	155,844,730
99	SNPforID	C____1732269_	rs1413212	0.421	0.0540	0.425	0.0759	1	240,873,420
100	Kidd-Other	C____7969752_	rs2291395	0.467	0.0548	0.471	0.0533	17	78,119,428
101	LowFst-other	C____1805324_20	rs1000160	0.464	0.0553	0.441	0.0854	13	99,748,453
102	Kidd-Other	C____11258596_	rs4789798	0.467	0.0557	0.470	0.0541	17	78,124,932
103	LowFst-other	E____rs6678938_10	rs6678938	0.443	0.0564	0.433	0.0903	1	24,286,118
104	LowFst-other	C____488643_10	rs12423234	0.452	0.0576	0.420	0.0951	12	4,800,621
105	SNPforID	C____9630073_	rs1490413	0.470	0.0579	0.467	0.0628	1	4,267,183
106	Kidd-Other	C____8245136_10	rs1542659	0.461	0.0589	0.448	0.0865	3	115,268,933
107	LowFst-other	C____11767475_10	rs9598504	0.464	0.0592	0.447	0.0959	13	33,518,493
108	Kidd-Other	C____1367957_1_	rs1034178	0.469	0.0595	0.463	0.0740	10	106,889,411

## Citations

\* Pakstis et al. 2007. *Human Genetics* 121:304-317. A PDF file of this paper (publication #461) can be downloaded at:

<http://info.med.yale.edu/genetics/kkidd/pubs.html>

\*\* Sanchez et al. 2006. *Electrophoresis* 27:1713-1724.

**† Recent scientific meetings where this information was presented:**

**Figures 1 and 2 of Poster presentation July 24, 2007 for the meeting of grantees of the U.S. National Institute of Justice, Washington, D.C.**

**Title: An expanded, nearly universal, panel of SNPs for individual identification.**

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**Figure 1 of Poster presentation August 22-25, 2007 for the meeting of the International Society of Forensic Geneticists (ISFG) in Copenhagen.**

**Title: SNPs for individual identification**

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