

Supplementary Table 1: Ampliseq primer sequences used for the amplification of DNA segments of the human opioid receptor genes suitable for NGS analysis by means of ion semiconductor sequencing.

Gene	Primer forward start	Primer reverse	Am- plicon start	Am- plicon stop	
<b>OPRD1</b>	CCTGGCAATCGCCATCAC	GGGTCTCAAGTTCGTGATCCC	29139036	29139194	
	TGTGCTCTCCATCGACTACTACAAT	CCCAGATACAGATGTTGATCAGCTTG	29185607	29185758	
	CCAAGATCTGCGTGTCTCTTC	AGACGATGACGAAGATGTGGATG	29189314	29189526	
	ACGCCAATAGCAGCCTCAA	TGTGGCCTCCGGTCACTAG	29189599	29189846	
	GACCTGTGGCTCTACAACCTGAG	CAGCTCAGTTTTCAAGCAACTGTC	29190088	29190257	
	GAGGACTCCAGACAGAAGAATC	GCACACGGTGATGATGAGGATG	29189101	29189372	
	GTCGGGCTCAAGGAGAAGGA	GCTTGAAGTTCTCGTCGAGGAAAG	29189414	29189655	
	CGCGAGCCATGATGTGGA	CTTCTGGAGATGCCTGTTT	29189864	29190135	
	CTTCCCTCCTTGAGTTTCATGTGA	TCATCATGGTGAGCGTGAAGATG	29185392	29185665	
	<b>OPRK1</b>	CTCTTACCTCCCTGACTTTGGT	GTGCTGTGCAAGATGAATTTCCATTG	54147312	54147544
		GAACATGACCAGCAGATTGC	CCCATGACAGATCTCCGC	54163352	54163589
		CCAGCACGGAGCTCTACCTA	TAGTGGGAGACGTGCGCTG	54163959	54164195
		CACAATTCACAGGTCTGGAACT	GATTGTGTGCTTGAATAAAATCAAAAC	54138077	54138330
		AAGGAAGCTGGTTATACCGTTTT	GTAAGTGAAGCTGTGAAAGTTGT	54138439	54138564
TGTCTGACAATAGTTATACACGTTTAA-		GGAGGAGAGTGAAACACTCTTAG	54138655	54138886	
GTAGAGAATGGATCTGAAGTTAAACACA		GCACAAATGTATTTCTTGTCAAAGTGTGT	54139018	54139266	
GTCTCTGGGTTTTCTGTTCCA		AGATGACATATGGCAGAATGGAAGTG	54139935	54140209	
CGAGAACTGCATGGTGAACAG		AGGAGCAGCACATTTAGGGTAATTTT	54140330	54140600	
GCTGAGAGCCACAAAATAGTACCTT		TGAGACATTTTGTGGGAATTAGTCAT	54140715	54140976	
ATTTTCAGTGGTATTACACCACCTTTATG		TGGTAAGAATTACAGCTTACATATGGCTTG	54141097	54141340	
GAAATGCATGTCCACACAGCATAAC		CTGATGAACAAGGGAACAGGTCTT	54141352	54141606	
AATTCTATCTTTTATGTCAGACTGCAGT		CATTCTACGCCTTCTTGTATGAAAAC	54141753	54142019	
AGGACCAGTCTGGTATCCTAC		ACGGTAATAACAATAACAGGTTTCTGTGT	54142170	54142443	
GGAGTCGATATTAACAAGAATCAAGAAGC		ACTCCTGACCTCAGAATATTACCT	54139363	54139613	
GGCCACTCCAGCCATTCTTA		GGTTTATGTCTTGGATAAGGAAGGCTTATA	54155362	54155577	
GGCATCTCTCTTCTGGCAATGT		TCATCTGTTGGCATCTCTGCAATAG	54147098	54147370	
AAGGTGAAGATGCTGGTGAACAT		CCTATGGGTTTGACTTGAAAATGGAG	54147483	54147726	
CGCGGAAGATCTGGATCG		CGGGCAAAGTTGCTCCTC	54163570	54163694	
CCTCTCAGCACTCCACCAAAAA		CGGTCTACTCCGTAGTGTTCGT	54163143	54163407	
TTTACCACAATAATTGACTGTTGTGATTTT		GCTGTTCCGATGATTCAGTATAAATACGAA	54138261	54138503	
CGAACAGCTCTGGTTAGAAAATAAATCTCAT		AAGAGTCACATAAAATCTTAAGAAAATGTTCT	54138496	54138746	
CGAAGGATGCTCTTAGATTGGTAACT		CACTGTCTGTTGTGCTCTTTGAGA	54138826	54139082	
TTACAGCAGGACATCAGGACAAAAC		GAATAGTAGCTGTATGTGCCACAA	54139201	54139427	
AGAAATACTCAAAGAGCACTTCATTTTCA		TAGCCCTATGTAACACAGACATCATTACA	54140143	54140392	
GGGAAAAAGAGGGAATTTATATGCATCTG		CGGAGAGGAAGGTGTTTTGCTT	54140534	54140772	
GACTAAATGGTATTGAGGAGTCTGAAA	ACAGTCTTATAATAAAGCATGTCCATTGT	54140911	54141162		
GTTCTGGTATAAGTGAACATCAGATTCTC	ATGGGAACATTTCCAGGGTTCATG	54141270	54141411		
GGTGCTGAACCTTACCTAGCAA	GAAGAGAGGAGTCAATGATCTAGGTTTAA	54141550	54141822		
GTGAAAGCAGAAGTCCCGGAAA	CTTCTGGCTCCCGAGAGAAAG	54141958	54142225		
AATTAAGGAAACACACTACTGTGATTTC	CTTCTGGCTCCCGAGAGAAAG	54141958	54142225		
AATTAAGGAAACACACTACTGTGATTTC	AAACAAGCCTGGTGAATAGGAAATATAA	54139851	54139998		
<b>OPRM1</b>	GAGCCTCTGTGAECTACTAAGGTG	CCGAGACTTTTCGGGTTCCAA	154360446	154360632	
	TCACCTATTGCAGCAACTGT	AGCTTTGATGCTATGGGATTAATTTGCTA	154429573	154429802	
	AGCATCATCTATAAAATGCCCGTT	CAGAGTGAGGTGTTTGTTGAAAAA	154407505	154407733	
	ACACCTAAAAGATAAGCCACGAAATGTA	GACAAATACTCAAAGTACAAAAACCAACA	154407869	154408133	
	AAAGTGAACCTCCCAAAGTAAAGTCCAA	TTTGTTTAGGACTGAATTCAGTGTTCA	154408240	154408471	
	GGTTCTCTCTCAGCTCTCAAAT	GGTGCTTTGGGATAGGCTGTATTAC	154408619	154408876	
	TGTACAATATTGTATGCCTGCACTA	TTTATTGCATGTAGCAACCACAAGAAC	154331742	154332014	
	GTCTTGACATTTAAGAAAACTGAGGCTT	GAAGCAACCTGCTTCCACATAC	154439669	154439925	
	GAGGAGTCCAGTTTGTGCAAGA	ATTCCCTTGCAAAACACTAAAAAGACTC	154440073	154440317	
	TAGCATGAAAGGTAATCTGAAACACAGT	GGAGCCTGCAGTATGGAGAAAC	154440465	154440739	

AAGACAGACTCATATGACCATACAGAAAAG	CCAAATCTCTACTGTGTTCCACAACAAAG	154440880	154441146
AAAAACTAGGCTGCTGACTTCTGA	CCCATCTACTGGATACGTGGGTT	154441282	154441510
ATTTTCTGACAAAAGTAACTAAAAC TAG-	TCATCTCTGGGAGAAACCATCCT	154441638	154441853
GACCTGATCTATCTTTTTCCACAATGTC	TCAGATTTTATCAGAAACCTTAGCCCAT	154441967	154442238
GTGGAAATTCTAGCTTATTGTGTTCCAAG	GCCGTGTCTTAGAAGAGGTTATTTAAAAC	154442384	154442658
ACAAATTCTGTTTCCACATTGTAC	CAGTACGCATCTTATCATTTCCACATATT	154442792	154443066
TATACAGACATATTCTCATCTACTGGCAA	GAAGAGGATAATTTCTCCAGCAACAGA	154443097	154443371
TCACAGGCCTATTGCTTGGTTT	TGAAGAACACTGACTATGGGTTGAAATTAT	154443473	154443742
TGTTCAACCTTTTGTATGCAATATCACC	CTTAGACAATGAGACCATTGATCCTGA	154443847	154444080
CTCTGCAGCTATTTGAGTAACTTCTTAT	GTTAGAAAGTAAGGCCAGCATAGA	154444262	154444517
ATTGACAGTGGACTAAAGGTACTTTTGT	CAGGAAATGCAAAGTGAGTTGAAAAAGTAT	154445248	154445522
AGTAGTTACCTCACTACCTTTTATCCA	CAGGAAATGCAAAGTGAGTTGAAAAAGTAT	154445248	154445522
AGTAGTTACCTCACTACCTTTTATCCA	CTCTGGTTAATATTGGGCAATTTTACT	154445998	154446270
GATGGTACCTGAATTTGCCTCTATCA	GAATCTAAACCTGTGTAATGGAAGAGGTTT	154446396	154446555
GCACAGAGTCCCTTGAGACA	AAAATGTCTAGCCTTAGTGGGC	154446655	154446929
GCTCAGGATAAGAACCAGACTAGA	CAGGCATTAGGAATCAGGTTTGC	154448651	154448917
GGTAAGCTGTAAGTACTGACTGCT	CCAGCCATTGAGAAGTTATATGATTGAAT	154449042	154449316
GCCAGTGATTTGTGTGTTTCTTAATAAA	CACTGGAATTTGCTATGGTGAACATT	154449360	154449593
TTTGAAACTCACAGTAGGAAATTGAGAGA	GCTATTACCTGGCAGTTCCTCAT	154449717	154449934
GGCTCTATTATGTCAAAAGAGAAATAGGAG-	GAAATCTAGTGTGTGAGCCCTTAAAAG	154450065	154450303
TACTAAAATACAATTTACCAAAGGCTTAC-	TGAAATCGATGGTTGGGTAGAGAC	154451084	154451286
AAAAATTTCTGTGTAGGCATAGCTATATGAA	TTCCATTAAAATAATGGAAATGTATGTGC	154451679	154451952
CCTGGCAATACATTTCTGAACTTT	GTGACAGAGCACCTAATCTTTAGACTT	154451992	154452209
AGAATCTGAGTAAATGAGAGCCTCTCAT	CCCAACTGTCAAGGAAACGA	154452392	154452641
GTTTCTGTTTACGGATTTGTATCCAAGT	CATCAAAAGGAAAACAATGTTGTGTGTT	154452787	154453049
ACAAAGCTACTATTTACATTTCCAGGT	ATGCAGGAACTTACAATACAGCCTAATAT	154453168	154453437
CCTGCTTCCGAGACTAGT	AAGTTGCCATTCGCGTCTT	154444590	154444861
GCTTCTTTACCACACTCTTTTATCAGTAAGA	TTTTCTCCCTTAAAATCTCAGTGTCA	154445011	154445244
ACAACCTTTTTCTAAGAGTCTGGGTAA	TCCTCTTGACAGTGAAATCACAAAC	154447355	154447531
TGCAGAAGTCTTTTATATTTCTGTATCT	TCCTCTTGACAGTGAAATCACAAAC	154447355	154447531
TGCAGAAGTCTTTTATATTTCTGTATCT	GGGAAAGTAAGAAGTCTAATATGTCACC	154447684	154447948
CACTTTTCTACCATAGTGATACATGTGG	CCTAAACCTTGAAGAGTAGGCAA	154448329	154448538
AGGGAGTCTTCTATACAATAGAGAACAGAA	TGTGGAAGTCTCCAATCATATATGATGTTG	154450393	154450667
ATTTCCCTTCCAGGAAGAGTCTA	CGGCAAGTTGGTCAGCAA	154428674	154428919
ACCTGCTGAAGATCTGTGTTTCA	GCAGAAGTGCCAAGAAACAGTC	154412138	154412412
CCACGGCCAATACAGTGGATAG	AGTTTCATGGATTTCTCATTGGTGTATCTT	154412573	154412840
AATTCATAGATGTTGCTGCAATACCC	TAGCTTAAAGAAAAGTTAGGGATGGTCATTTTT	154412955	154413143
GAAACTCAACAAAGCAGCATCGTT	TGGCAGTCTTCACTTGGTGTATC	154410740	154410983
TACTATAACATGTTCAACAGCATATTACC	ATCACCACATATCAGGCTGTGAA	154411118	154411370
CCTTGGCGTACTCAAGTTGCT	CATGACCAGGAAGTTTCCGAAGA	154360726	154360955
AGTATCCCTCAACACAGAAAACGAC	CAAACGGTTGAATGAATGGCAATAAAATAA	154428973	154429145
ACATAGAATGTGAGAGGTAGCACATAAGA	GCTAACATTTCTTTGGTCTAGACTAGAGA	154430065	154430213
CCCTTCTTTTTGTCTCAATCTCAAAA	CTTCCAAAATAACAATAAAGCTTCTGCA	154445706	154445878
GATGAGCTCCAGACTGTTG	GGAGGGTGTGCGTGGTAAAGTA	154450829	154450979
CCCTCATTAACCCGCTGGGAAT	ACTTACCTACCAAACTCAGGGTAATACATT	154567680	154567951
AGATATGACCTCCAGCTATCCTTC	GACAGAACCTCCCAATTAGCTTCTT	154414492	154414707
GGCAACAAGGACTGCAAAAGAAAATT	ATCTAAAGGAGGGAGATGGAGAGAAG	154360044	154360297
CAGAGCAAAACACATGTGATAAAACATAGG	GTTTTCTCTCTCCTTTTCTTTCTT	154429317	154429519
GCCAGGACTGGTTTCTGTAAGAAA	GCCATCTAAGTGGGACAAGTTGAC	154360545	154360796
GAAGGTAAGTCCGTGTGGTTAA	ATTCAAAGGCTATTTTTAAGCTGGTGTATT	154428807	154429040
CCGTTTGCACAGAGAGAAAGAAGA	GCTAGTCTGATATTTGGTCTAAGCA	154429139	154429384
CCGTTTGCACAGAGAGAAAGAAGA	GCTAGTCTGATATTTGGTCTAAGCA	154429139	154429384
GGCAAAACAGTTGCCCTGAGTA	GGCAGGGTTGGACATGTACAG	154429459	154429724
CCGCTTTATAAACTTTAATTGACTCCCAT	CATATTGCTGGTCCATGAAATAAAATCCC	154429894	154430133
TTCTTTTACCATGTTGAACCTT	TTCAATGCAATTTGCCACTTTCCTAC	154407676	154407933
TGAGACCAAGGTCAATATTCTAAATCTT	CAGAAAAGCTCCACATTTTCCAGACTTG	154408047	154408304
GAAATCACTTCTGATGTTATTGAAACCA,	AGCTTGCTGAAAATGGACCTAATCC	154408404	154408678
CCCGGTCACTAAACGTCTTAC	CAGAAGTATACCTGTAACATTGGACATC	154408819	154409000
AAATCATCCATCCAAAACAAAATTGTCT	GCTTCTCTATCTCCAGTGAGTTTCA	154331533	154331805
GGGCTCCTGCTTTCTGTAAAT	AGCAAAATGCAATGAAAAGGATTTCTTCA	154331955	154332206
CATTCGACCTTACCAAGCTTA	ACATACCAGATGGGTTTTGGT	154439870	154440127
CTACCTCTGATCAAAGCACCTTGA	CTACCTCTGATCAAAGCACCTTGA	154440255	154440529

	CAGGAAGTCAAGCATTAAATGTACTCTTT	ACATCCAAGTAACTACACAGGATTGAAAAA	154440677	154440950
	AGTAGTTTCTTTAAGACAATTCTCCGCTT	ACAATTTTACAATTGTAGGCTCAGGAATAC	154441078	154441335
	ACTGAATTTACTCTCAGATCTATTGGC-	ACACCCTAGTACACTTATTTAACATTCTAAATC	154441444	154441709
	AAATAACTGAGGAGGAAAAATCCATGCT	GTCTCAAAGATGACATGGAAGAAACTTG	154441792	154442034
	GCAAGGAGAGACATTACAACCCT	ACAGTGGAGACTGAAGGAGAAAAAC	154442176	154442446
	GCCATTTGAAACACTTCTCAACATTGAAAT	CTTTTGCCTGGATCTGAGATGTA	154442588	154442852
	ACAAAGAAAACACCTCTGCAAAGATTC	GCTGGAGAAATTTCTAGTGCCATCT	154442888	154443162
	TGTGTTGTACAATTCTGAGGTCAATCA	CCCAGGCATTTATGAACTTTCATGTTT	154443302	154443532
	GCATCCATTTAAGAGCCATTTAATCCA	ACTCATCTGCTACTGCTTTAAGAATGG	154443675	154443914
	TGCAAGAAAAGAAATTCAGGAGTAAAGTGAA	AGAAGTTACTCAAATAGCTGCAGAGATG	154444014	154444286
	GGAGCCCACTAATCACACAGTG	GAGAAGAAAAGACCAATCAGTTAGGT	154444460	154444648
	CAAACACCTCTGACACTGAATTACAAAT	ACACTGCATTTATTAATATTGTGTGGAA	154445177	154445315
	TTCAGAGAAAAGATCAGTTTTCTATGGGTTT	GCAATTTCAAGTGCAGGTTTTAATGAAG	154445433	154445567
	AATATGCTCCTGGAACATACTACTGG	GCTCTACAAAATGTCTGAGTGCTTTTAGA	154445813	154446065
	CCTGTGGGAGCAATACAAACTATAACC	TCATGAAATAGCTTTGGATGACAACAAATC	154446203	154446462
	CCACAACCTGTGACATAAAACCTAAACC	TTACAGTGCATGTGACAATATGAAGATGA	154446487	154446715
	GACCAGTTAGGTGTTTTCAGAAACAC	CAGGTACATCTCAATTGGTGGTGT	154448478	154448712
	AGGTTGATTCTGTTCTCTGTCAT	GCCATGAATTTCCATAAAGCAAATGAGTTT	154448860	154449106
	AATCTGGCAAGTGTCTCAGGATC	GAATCCCGTAGTCAGAAATTAACCCAC	154449248	154449448
	CAATTCCTAATAACAGCTGAAGGACCAT	AACTGTCTCAGGATCAATGATAAAAACAGT	154449528	154449786
	CTTGACCTCATGGAGAGCTGAA	CTACACCATGAGGTTCTATACTTCAAAT	154449880	154450151
	AGAGGGTCTTTCTCTCTCAATG	TCTTCAAAGCTTGAGCAGCTGTA	154450612	154450884
	AGTTTCTTATCAGTCAGGCACCTTG	AGAGTGAAGTAAATTATTGATGCTGGA	154450920	154451155
	CTGCTTATATTCTGAGTCTGAAAGAAGG	TTCATACCATGTTTTGAAAGGTGATTGTG	154452580	154452854
	GTTTGTGTGATAATGCACAAAAGGAA	GTAGTCTTTTGAAGCTGCATCTGAT	154452983	154453233
	TTTTGCATTGTATTGTTCTGATGTACCAG	CCTACGTCGCAACATTTACTTGG	154453367	154453575
	CTGCTTATATTCTGAGTCTGAAAGAAGG	TTCATACCATGTTTTGAAAGGTGATTGTG	154452580	154452854
	AGAAGGGAGAGGAGACTACATTTGT	GCAGTGTAGGGTGTGACATTG	154447471	154447745
	AGTGCCACATGCCATGCTAT	TCAAAGCATGACATCTCAGAACACA	154448255	154448393
	CAAAATCCAAGCTCCCTGAGTACA	TTGTATAGAAGAACATTGTTCTGTTCTATT	154450240	154450441
	GCAACCTCCTGGTGCTTAGAG	GAAATAGTTACAAGCCTTTCGAAACTCAA	154428493	154428737
	GAAAAGTAACAACAACACTGAGTTTCTTCCA	CGGTAATGATGAGCACTGGCATAAT	154411929	154412197
	AAAGCCTGGTTACAATCCCAGAA	CCTAATCTAGAGACTGCGTACCTGAT	154412356	154412629
	GAGAAGAGGTTTGTATA-	CCAGAGCAAGACTGGCTTTTG	154412747	154413012
	TGTCTTTTACTGATTCTCACTCTTCTCC	AGACTGCAATGTATCGATCAACACTC	154410920	154411184
	CGATCATGGCCCTACTCCAT	GGGAGTTAGGTGCTCTTTGTACC	154360894	154361041
	CGTGAGAAAACCTGCAATGATTACATG	GGTTTTGCATAGGCTTTCATAAATCT	154567884	154568053
	TTTTTGATAAATTCACAGGGTTACAAAATACC	CACTCATGTTGTTCAAGTGAATATGGC	154447248	154447419
	TTGGCACAATATCCATTATTTAATGGG	CACTCATTGTTTTACATTTTCATAACTGGCTAT	154451920	154452060
	ACTCTGTCAAACATAGCAAATAGGAAAGT	GGAGGCATCTTTCTTTCTAGTGGAAAT	154452143	154452294
	CGCCTGGCCAGAAATGTTTAAAT	GGGATTTATAGGCAAATATTCATATAGCTATGC	154451594	154451728
	ACATGTTAAAGATTGCAACTTAAATGCCT	TGGGAGCAGTATTTCCACGAAG	154414277	154414549
	ACATTGCTAAGAATAAGCATTATAATTGG-	GATGAAAAACTCACAAAATGGTCTCC	154431425	154431647
	CACTGTACCAAAGACTAACTCTATCTC	CATCTGACATTTCTCTCTGCGTAT	154360233	154360503
<b>SIGM</b>	GTGCCGAAGAGCAGCACATA	CGGAGCTAGGGTCCGAA	34637243	34637500
	CCCAACACACTCTTTTCCATG	CCATGCCCTCTTTCTGATGTTT	34636900	34637167
	AGAGGTAGGTGGTGAGCTCAA	CAGAGCTGCCTTTTCACTTGG	34635646	34635894
	AAAAATCTACCATGAATCACACAGCAA	ACACACACATATCACAGTTTTCAACA	34634625	34634811
	CTGGAATGGAAGACGCTGACTT	GGGAGGGTATTATACTGCCTCA	34634972	34635245
	GAAAGGCCCTAGTTAGTGAGTCAA	TGTATGAGCAGGGATATCCATGCTTA	34635306	34635508
	TACGGCTCGCCCTGACCAA	CTGAAGACCCTGACATCTGCC	34637811	34637970
	TTGCATGGCCAGCCAAACAT	GCCTTCTCTGCTGATCGT	34637130	34637400
	CTCAAATTGCTGCTGGGTTGA	AGCCAGTTGTGTTCCAGACACA	34635193	34635361
	GCGCCAACTGCGCTATCT	ATTGGTCAGGGCAGCCGTA	34637556	34637830
	AACAGACAGATGGACAGAGAATGC	GGGAACGAGAGTAATTTGAAGAATGC	34634750	34635022
	CATTTGTTCCATGGGTCTCTGT	TCTTCTATACTCTTCGCTCCTATGCT	34635449	34635705
	CGTACTCCACCATCCATGTGTT	TTTTTCTGAAGCTCCCTCCATT	34635781	34635973
<b>OPRL1</b>	CGCCGTTCTGGGAGGTTATCTA	GACTCACCAGACAGGAACCTTG	62724093	62724341
	GCTTCTGGCCGTTTGGGAA	CCGAGCCCATGATGGCAA	62729262	62729492
	TCTGTGTGTGCAGAGTCACTTG	GGTGGCTGTCTTCAATTTGGTG	62728906	62729179
	ACAGGTCGAGGATGAAGGTCA	CTGTAGCAGACAGAGATGACGA	62729494	62729746
	TCTCGGGCTCCCAGAGAA	GCAGATGCACAGCAGAATTG	62729782	62730052

ATCTACGCCCAACACAGAGCT	CTCCAGGTAGTCTTGTGT	62730197	62730436
CCTCTGAAGTTTTCTGTGTGCT	CCTCCACTTTGTGAACAGAGCT	62730864	62731106
GGACGCCTGCTTCATTACAAG	CAACCTGCAGCTTCCATCTGTA	62731293	62731552
AAACCTTGGCCAGGTAACCTAC	TGCATAAATACGTGAAGGTGCACATTA	62731630	62731888
GCATGTGTGCTTTGTGTTCTGTG	CTGCAAATCCACTCTGTACGGTA	62723801	62724064
GGGTCTGAGCCTCCTTTTCAT	GTGCAGAGCAGGGTAGAAGAGGA	62723144	62723397
CACCTCTGGTCCCTACACC	CTGGAAAGGACGCTCACCCAAG	62716246	62716518
CCTCTTTTTATAGGACTGGAAAACCTGA	GGCAGCAATAAACATGCTTTTAGATCTC	62717646	62717920
CGGAGAGTCGAGGTGCTCA	GTCCACACGGATGGCAAAG	62711482	62711614
GCTGTGTGCTGTTGCATGG	GGAGTCGGAACAGGCAAGTC	62730596	62730769
AGTGAAGCCTTTCTTCCCTCTA	GTAGTAGTCAATGGCAATGACTGTCT	62729123	62729317
GAGCCGCACGGTAGTAGATG	GGCTCTTAACCCAGTTTTACAGACG	62711529	62711768
TCTGCATCTTCTTCTCCTTCAT	CGTGCAGAAGCGCAGAATG	62729689	62729954
CCTCTACGCCTCCTGGATGA	TGTCGCTAGAGAGCAGT	62729990	62730246
TAAAGCTGCCCTCCTGGTGCA	GAGACGTCACAGGGCTGAAG	62730384	62730650
CAGCAGGCAGCTTTCTTTGG	CCAGAGTCAAGCTGCAGTCA	62730691	62730927
CCAGCGGTGCAATGAACTATCA	CTCCACCCAAACAGAGCAGTCA	62730982	62731146
CTGTGGTCACCCAGAGAATCAC	GCCATCACTTCTGTTCTTTGC	62731498	62731684
CAAGGCGAGGTGTTTGTGAAT	GAAAAGTCACTCCAGAAGCAAATCC	62731829	62732048
ACTGCAGCCACTTGTCTCTG	CCCACGATGGTGACCTTGA	62724008	62724240
TGTCATGTACGTATCCTCAGGT	CAGGAAATCAACACCTGCTCAG	62724286	62724413
GATTCACGTGTTTTCAAGGGCTA	GCCGCACATTTGTGCTATTAATAA	62717858	62718130
CTGGCGTCTGCTGAGAAGA	TGCTTTGCTGCAGTCTGTCA	62723356	62723529
GGGCATAGAGGCATAGAGCC	CAAAGGTCTCCTATAGCCGAG	62716466	62716625

Supplementary Table 2: SNPs listed at the dbSNP database at <https://www.ncbi.nlm.nih.gov/SNP/> that are missing from the present human opioid receptor NGS panel.

Chromosome	Chr start	Chr end	Gene	dbSNP	Molecular consequence
<b>Chr1</b>	29138974	29138975	<i>OPRD1</i>	rs1042114	missense
<b>Chr1</b>	29139048	29139049	<i>OPRD1</i>	rs111622802	missense
<b>Chr1</b>	29185830	29185831	<i>OPRD1</i>	rs56235660	intron
<b>Chr6</b>	154445665	154445666	<i>OPRM1</i>	rs73790436	intron
<b>Chr6</b>	154447971	154447972	<i>OPRM1</i>	rs2003185	intron
<b>Chr6</b>	154447973	154447974	<i>OPRM1</i>	rs149130418	intron
<b>Chr6</b>	154448020	154448021	<i>OPRM1</i>	rs676370	intron
<b>Chr6</b>	154448103	154448104	<i>OPRM1</i>	rs117652471	intron
<b>Chr6</b>	154448136	154448137	<i>OPRM1</i>	rs523731	intron
<b>Chr6</b>	154451286	154451287	<i>OPRM1</i>	rs505340	intron
<b>Chr6</b>	154451301	154451301	<i>OPRM1</i>	rs200919735	intron
<b>Chr6</b>	154451306	154451306	<i>OPRM1</i>	rs201523291	cds-indel
<b>Chr6</b>	154451307	154451307	<i>OPRM1</i>	rs200331479	intron
<b>Chr6</b>	154451396	154451397	<i>OPRM1</i>	rs506320	intron
<b>Chr6</b>	154451457	154451458	<i>OPRM1</i>	rs507129	intron
<b>Chr6</b>	154451505	154451506	<i>OPRM1</i>	rs641457	intron
<b>Chr6</b>	154451523	154451524	<i>OPRM1</i>	rs113834157	intron
<b>Chr8</b>	54139673	54139674	<i>OPRK1</i>	rs10094852	untranslated-3
<b>Chr8</b>	54139698	54139699	<i>OPRK1</i>	rs140284429	untranslated-3
<b>Chr8</b>	54155334	54155335	<i>OPRK1</i>	rs147754584	intron
<b>Chr8</b>	54155341	54155342	<i>OPRK1</i>	rs57560123	intron