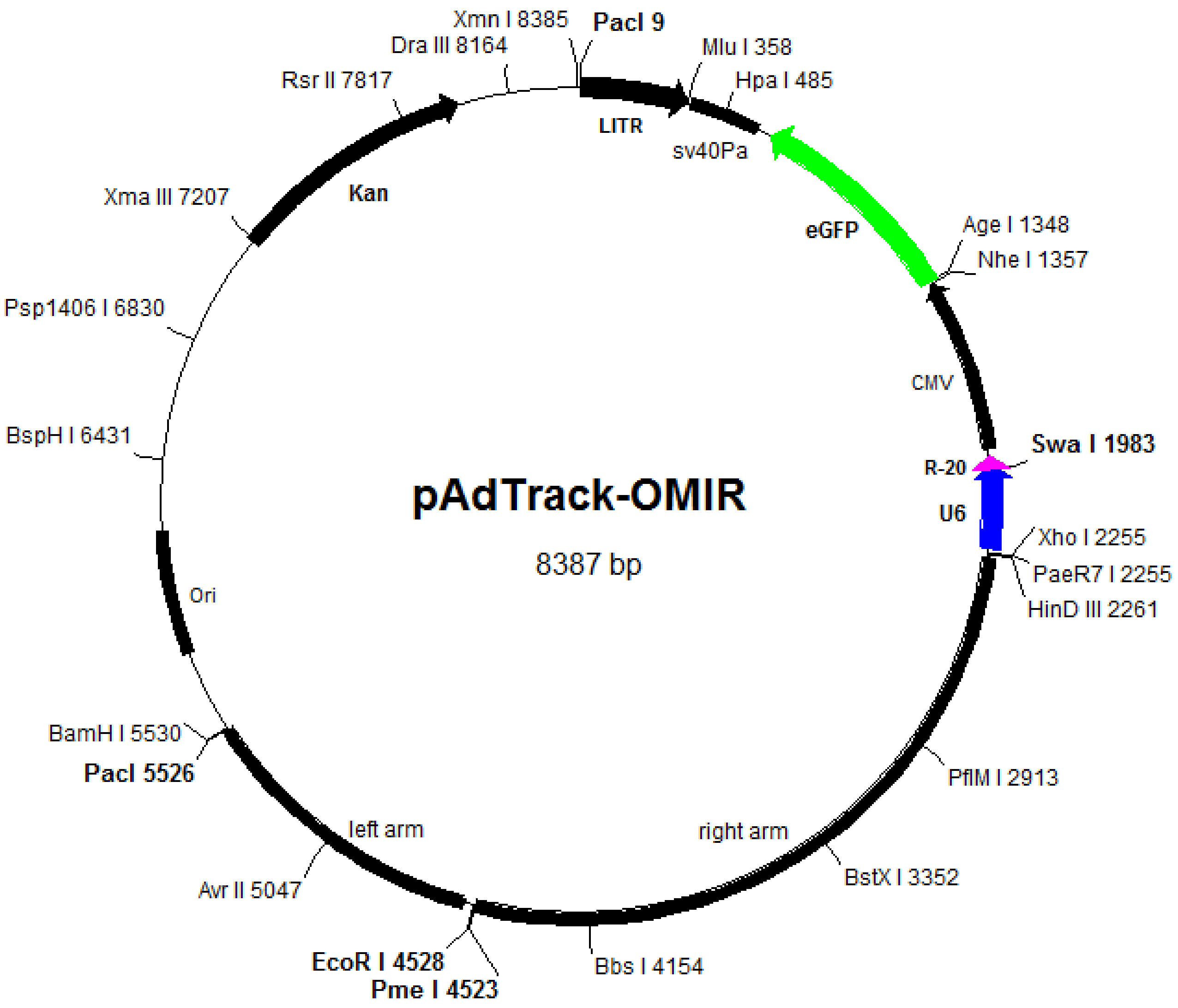
Vector: **pAdTrack-OMIR** (adeno shuttle vector for one-step mature miRNA expression)

Antibiotic Selection: Kan

Creator(s): Xian Chen, Molecular Oncology Laboratory of The University of Chicago

Date of Construction: June, 2013



Forward (5p) Oligo:

`5'-tgtggaaaggaaaggaATTTxxxxxxxxx-5ptttttttaaggtcgggcaggaagagg-3'`

Reverse (3p) Oligo:

`5'-atcttgtggaaaggaCGAAACACCyyyyyyyyy-3pttttttAAATCGCCACATAGGTTCGT-3'`

3p Reverse-Complement

`5'-ACGAACCTATGTGGCGATTTaaaaaap3-yyyyyyyyGGTGTTTCGtcctttccacaagat-3'`

pAdTrack-OMIR Full-Length Sequence

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NNNTTAATTAANNNTCCCTTCCAGCTCTCTGCCCCTTTTGGATTGAAGCCAATATGATAATGAGGGGGTGGAGTTTG
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Unique enzymes in pAdTrack-OMIR:

Mlu I	A`CGCG,T	358
Hpa I	GTT|AAC	485
Age I	A`CCGG,T	1348
Nhe I	G`CTAG,C	1357
Swa I	ATTT|AAAT	1983
PaeR7 I	C`TCGA,G	2255
Xho I	C`TCGA,G	2255
HinD III	A`AGCT,T	2261
PflM I	CCAN,NNN`NTGG	2913
BstX I	CCAN,NNNN`NTGG	3352
Bbs I	GAAGAC 8/12	4154
Bbv II	GAAGAC 7/11	4155
Bst1107 I	GTA|TAC	4508
Xca I	GTA|TAC	4508
Pme I	CTTT|AAAC	4523
EcoR I	G`AATT,C	4528
Avr II	C`CTAG,G	5047
BamH I	G`GATC,C	5530
BspH I	T`CATG,A	6431
Psp1406 I	AA`CG,TT	6830
Eag I	C`GGCC,G	7207
Xma III	C`GGCC,G	7207
Rsr II	CG`GWC,CG	7817

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Dra III      CAC,NNN`GTG     8164
Xmn I        GAANN|NNTTC     8385
Number of enzymes = 25
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The following enzymes do not cut in pAdTrack-OMIR:

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Acc65 I      Afl II       Asc I        Asp718       Bgl II
Blp I        BsiC I       BsiW I       BstB I       Bsu36
I
Cla I        Eco72 I      EcoN I       EcoR V       Esp I
Fse I        Kpn I        Not I        Nru I        Pml I
Pvu I        Sal I        Sca I        Sfi I        Spe I
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pAdTrack-OMIR: sites sorted by name:

```
Aat II       (4)   1509     1695     1778     1831
Acc I        (2)   3569     4507
Aci I        (107) 88       106      126      151
                   233      243      294      658
                   661      721      834      972
                   1011     1078     1119     1361
                   1422     1443     1547     1580
                   1671     1838     1852     1864
                   1892     2340     2343     2346
                   2472     2535     2538     2541
                   2550     2562     2566     2568
                   2600     2631     2635     2765
                   2854     2872     3000     3118
                   3371     3374     3459     3463
                   3480     3576     3656     3795
                   3812     3870     3913     3974
                   3984     4220     4222     4264
                   4340     4345     4354     4682
                   4954     5068     5098     5273
                   5405     5426     5444     5551
                   5577     5594     5637     5644
                   5665     5756     5784     5911
                   5930     6051     6161     6296
                   6305     6667     6758     6888
                   7011     7107     7210     7273
                   7367     7431     7532     7535
                   7775     7815     7820     7870
                   7886     7912     8054     8193
                   8308     8335     8363
Afe I        (4)   1356     3038     4153     5089
Afl III      (4)   158      358      4674     5711
Age I        (1)   1348
Aha II       (8)   1506     1692     1775     1828
                   3308     4261     7053     7301
Ahd I        (2)   2872     6604
Alu I        (46)  25       469      632      806
                   917      965      1181     1214
                   1286     1319     1386     2263
                   2385     2618     2710     2990
                   3076     3126     3276     3618
                   3645     3715     3721     3924
                   4244     4301     4388     4632
                   4847     5171     5653     5879
                   5969     6015     6272     6793
                   6922     6975     7001     7047
                   7138     7407     7865     7994
                   8212     8251
Alw I        (27)  596      616      646      843
                   1370     1950     2723     2815
                   3014     3405     3568     3946
                   5526     5537     6273     6359
                   6359     6456     6457     6857
                   6858     7121     7138     7168
                   7479     7546     7725
AlwN I       (6)   2552     2710     2795     4516
                   6127     6925
Apa I        (2)   3365     3671
ApaL I       (2)   3251     6025
Apo I        (7)   257      430      1984     3262
                   4528     7966     7977
Ase I        (5)   5        2159     5003     5522
                   6776
Ava I        (4)   2255     2682     2862     4937
Ava II       (8)   680      2866     2890     3915
                   4056     4134     6742     7817
Avr II       (1)   5047
BamH I       (1)   5530
Ban I        (11)  1300     1483     3048     3469
                   4260     5164     6552     7052
                   7300     7335     8201
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Ban II       (8)   2387     2444     2600     3365
                   3671     4390     7666     8239
Bbe I        (3)   4264     7056     7304
Bbs I        (1)   4154
Bbv I        (20)  764      767      1190     2345
                   2348     2540     2567     2627
                   2719     3654     3670     3730
                   4253     5113     6130     6133
                   6339     7374     7416     7937
Bbv II       (1)   4155
Bcl I        (2)   587      7142
Bcn I        (19)  656      1310     2420     2684
                   2685     2864     2865     3210
                   3602     3692     4101     4327
                   4939     4940     6092     6788
                   6909     7306     7466
Bfa I        (12)  397      598      1358     1949
                   2268     5048     6206     6459
                   6794     6860     7002     8315
Bgl I        (7)   1672     1743     1865     2744
                   4795     6724     8384
Bpm I        (5)   657      897      2428     5056
                   6674
Bsa I        (5)   2492     2880     3856     4368
                   6665
BsaA I       (7)   1612     2122     3143     5354
                   6874     7605     8164
BsaB I       (3)   586      2807     7160
BsaH I       (8)   1506     1692     1775     1828
                   3308     4261     7053     7301
BsaJ I       (37)  925      980      1004     1167
                   1307     1337     1588     2411
                   2418     2566     2682     2862
                   3084     3096     3208     3365
                   3378     3502     3503     3600
                   4028     4044     4115     4196
                   4220     4232     4250     4325
                   4850     4937     4938     5047
                   5871     6906     7110     7464
                   7733
BsaW I       (10)  603      618      1348     3247
                   4634     4861     5917     6064
                   7034     7332
BseR I       (4)   1311     3954     4270     4839
Bsg I        (7)   792      1116     1213     2634
                   3244     4299     5224
BsiE I       (7)   1349     2882     4928     5627
                   6051     7210     8197
BsiHKA I     (9)   734      2357     2387     3255
                   4015     4390     6029     7414
                   7604
Bsm I        (4)   406      499      3337     4368
BsmA I       (11)  1515     2493     2517     2879
                   2963     3300     3857     4367
                   4960     6666     7144
BsmB I       (2)   2964     3299
BsmF I       (8)   1454     1622     1773     2879
                   3748     3901     4485     7452
BsoF I       (68)  470      659      753      756
                   807      814      1098     1120
                   1179     2334     2337     2340
                   2343     2346     2529     2538
                   2541     2550     2553     2556
                   2616     2708     2998     3372
                   3375     3643     3646     3659
                   3716     3719     3722     3812
                   3985     4104     4155     4223
                   4242     4264     4345     4553
                   5099     5102     5617     5635
                   5638     5756     5911     6054
                   6119     6122     6328     6656
                   7107     7210     7262     7273
                   7363     7368     7405     7446
                   7533     7536     7539     7775
                   7871     7912     7926     8344
Bsp120 I     (2)   3361     3667
Bsp1286 I    (2)   2357     7604
BspH I       (1)   6431
BspM I       (8)   2719     3581     3621     3941
                   4615     6959     7188     7569
BspM II      (3)   618      4634     4861
Bsr I        (19)  729      1658     3023     3703
                   4818     5123     6118     6131
                   6245     6651     6769     6812
                   6884     6929     7010     7094
                   7244     7445     8078
BsrB I       (4)   5070     5644     7914     8308
BsrD I       (3)   3363     6665     7534
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BsrG I       (2)    207     626
BssH II      (5)    2848    2850    4106    4237
                    8365
BssS I       (5)    1155    4267    4374    5884
                    7893
Bst1107 I    (1)    4508
BstE II      (2)    3928    4817
BstN I       (22)   927     981     1056    1168
                    1293    1668    1861    2908
                    3085    3379    3424    3504
                    3910    4029    4116    4182
                    4381    4413    5739    5860
                    5873    7688
BstU I       (35)   88      231     233     294
                    350     360     693     1011
                    1892    2401    2568    2637
                    2850    2852    2854    3459
                    3974    4108    4174    4222
                    4239    4309    4342    4579
                    5279    5446    5758    6339
                    6669    7367    7668    8056
                    8348    8365    8367
BstX I       (1)    3352
BstY I       (16)   600     609     836     1363
                    1954    2716    5530    6352
                    6363    6449    6461    6850
                    6862    7114    7472    7718
Cac8 I       (54)   804     811     1135    1183
                    1216    1359    1673    1866
                    2405    2472    2566    2600
                    2604    2608    2635    2726
                    2850    2852    3074    3092
                    3461    3809    3881    4108
                    4112    4239    4246    4349
                    4796    4958    5277    5642
                    5728    5765    6325    6716
                    6953    6977    7028    7045
                    7195    7381    7600    7666
                    7672    7700    7704    7745
                    7749    7803    8267    8310
                    8324    8367
Cfr10 I      (11)   202     1185    1348    3661
                    4157    4463    4794    6684
                    7620    7801    8265
Csp6 I       (12)   208     627     909     1411
                    1568    1619    1652    1707
                    1732    2130    3996    7606
Dde I        (11)   613     715     733     2594
                    2703    3277    3638    3734
                    5986    6395    6561
Dpn I        (35)   589     602     611     652
                    690     838     1365    1956
                    2718    2810    3020    3400
                    3433    3563    3614    3952
                    5532    6279    6354    6365
                    6373    6451    6463    6568
                    6852    6864    7116    7133
                    7144    7163    7474    7552
                    7633    7642    7720
DpnII        (35)   587     600     609     650
                    688     836     1363    1954
                    2716    2808    3018    3398
                    3431    3561    3612    3950
                    5530    6277    6352    6363
                    6371    6449    6461    6566
                    6850    6862    7114    7131
                    7142    7161    7472    7550
                    7631    7640    7718
Dra I        (9)    546     1983    2067    2080
                    2771    4523    4726    6470
                    6489
Dra III      (1)    8164
Drd I        (4)    4200    5819    7328    8119
Dsa I        (9)    1337    1588    2411    2566
                    3365    4044    4196    4220
                    7733
Eae I        (11)   283     875     1264    4112
                    4178    4392    4787    7207
                    7381    7772    7799
Eag I        (1)    7207
Ear I        (4)    2236    5595    7645    7855
Eco47 III    (4)    1356    3038    4153    5089
Eco57 I      (9)    946     1143    1189    2530
                    2761    4167    6258    7446
                    7878
EcoO109 I    (5)    2226    2890    3093    4056
                    4350
EcoR I       (1)    4528
EcoR II      (22)   925     979     1054    1166
                    1291    1666    1859    2906
                    3083    3377    3422    3502
                    3908    4027    4114    4180
                    4379    4411    5737    5858
                    5871    7686
Ehe I        (3)    4262    7054    7302
Fnu4H I      (68)   470     659     753     756
                    807     814     1098    1120
                    1179    2334    2337    2340
                    2343    2346    2529    2538
                    2541    2550    2553    2556
                    2616    2708    2998    3372
                    3375    3643    3646    3659
                    3716    3719    3722    3812
                    3985    4104    4155    4223
                    4242    4264    4345    4553
                    5099    5102    5617    5635
                    5638    5756    5911    6054
                    6119    6122    6328    6656
                    7107    7210    7262    7273
                    7363    7368    7405    7446
                    7533    7536    7539    7775
                    7871    7912    7926    8344
Fok I        (19)   184     258     942     1308
                    2614    2944    3143    3439
                    3481    3715    4323    6570
                    6751    6923    7106    7168
                    7625    7650    8014
Fsp I        (2)    6826    7403
Gdi II       (9)    876     1263    4179    4391
                    4788    7206    7208    7771
                    7798
Gsu I        (5)    658     898     2429    5057
                    6675
Hae I        (7)    285     3443    4114    5726
                    5737    6189    7383
Hae II       (12)   1358    3040    3808    4155
                    4264    5091    5589    5959
                    7056    7304    8315    8323
Hae III      (37)   285     765     877     1166
                    1266    1675    1868    2227
                    2417    2861    3094    3363
                    3377    3443    3501    3669
                    3746    4027    4114    4180
                    4230    4351    4394    4789
                    5198    5726    5737    5755
                    6189    6647    6727    7209
                    7383    7774    7801    8014
                    8156
Hga I        (6)    1422    2415    3315    4164
                    5821    6399
HgiA I       (9)    734     2357    2387    3255
                    4015    4390    6029    7414
                    7604
HgiE II      (2)    3653    6290
Hha I        (55)   88      202     233     350
                    695     1011    1052    1357
                    2403    2724    2850    2852
                    2854    3039    3459    3807
                    4052    4096    4108    4110
                    4124    4154    4174    4239
                    4241    4263    4309    4344
                    4581    5090    5448    5588
                    5621    5891    5958    6058
                    6232    6341    6734    6827
                    6957    7055    7126    7295
                    7303    7367    7404    7670
                    7930    8314    8322    8348
                    8367    8369    8378
HinC II      (2)    485     2649
Hind II      (2)    485     2649
HinD III     (1)    2261
Hinf I       (20)   615     1539    2211    2672
                    2792    2925    3213    3769
                    4321    4865    4879    4901
                    5611    5686    6082    6599
                    7786    7920    8091    8113
HinI I       (8)    1506    1692    1775    1828
                    3308    4261    7053    7301
HinP I       (55)   86      200     231     348
                    693     1009    1050    1355
                    2401    2722    2848    2850
                    2852    3037    3457    3805
                    4050    4094    4106    4108
                    4122    4152    4172    4237
                    4239    4261    4307    4342
                    4579    5088    5446    5586
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		5619	5889	5956	6056
		6230	6339	6732	6825
		6955	7053	7124	7293
		7301	7365	7402	7668
		7928	8312	8320	8346
		8365	8367	8376	
Hpa I	(1)	485			
Hpa II	(43)	203	604	619	655
		1186	1246	1309	1349
		2418	2683	2863	3208
		3248	3498	3600	3662
		3690	4099	4158	4325
		4464	4635	4795	4862
		4938	5918	6065	6091
		6281	6685	6719	6786
		6908	7035	7206	7283
		7305	7333	7464	7554
		7621	7802	8266	
Hph I	(19)	120	841	970	994
		1322	1327	1578	2933
		3923	4094	4394	4490
		4812	5415	6448	6675
		6849	7480	8166	
Kas I	(3)	4260	7052	7300	
Mae I	(12)	397	598	1358	1949
		2268	5048	6206	6459
		6794	6860	7002	8315
Mae II	(31)	81	113	187	889
		1060	1273	1506	1611
		1692	1775	1816	1828
		2116	2121	2912	3142
		3407	5236	5348	5353
		5419	5451	6414	6830
		6873	7417	7604	8108
		8120	8163	8273	
Mae III	(39)	77	109	183	218
		266	337	455	663
		1152	1450	1799	1886
		2038	2117	2575	2922
		3315	3513	3928	4077
		4479	4799	4817	5179
		5237	5330	5349	5354
		5398	5420	5452	6067
		6130	6246	6529	7421
		7727	8337	8349	
Mbo I	(35)	587	600	609	650
		688	836	1363	1954
		2716	2808	3018	3398
		3431	3561	3612	3950
		5530	6277	6352	6363
		6371	6449	6461	6566
		6850	6862	7114	7131
		7142	7161	7472	7550
		7631	7640	7718	
Mbo II	(18)	856	1049	1052	1097
		2224	3306	3396	3597
		3634	4155	5583	6372
		6445	6846	7661	7871
		7953	8303		
Mlu I	(1)	358			
Mme I	(5)	2500	2695	5925	6109
		8140			
Mnl I	(55)	56	304	521	530
		569	830	950	1001
		1013	1151	1244	1250
		1331	1411	2238	2263
		2541	2760	2765	2880
		2964	3214	3329	3459
		3528	3974	4068	4121
		4226	4248	4251	4263
		4283	4456	4584	4859
		4982	5049	5073	5331
		5478	5609	5819	5892
		6143	6543	6624	6770
		7066	7152	7216	7352
		7709	7901	8192	
Msc I	(3)	285	4114	7383	
Mse I	(36)	5	9	363	484
		545	1943	1982	2066
		2079	2159	2691	2770
		3122	3707	3755	4522
		4725	4828	5003	5142
		5245	5368	5522	5526
		6417	6469	6474	6488
		6541	6776	6815	7974
		7986	8003	8101	8371
Msl I	(5)	1587	3350	3415	4609
		7738			
Msp I	(43)	203	604	619	655
		1186	1246	1309	1349
		2418	2683	2863	3208
		3248	3498	3600	3662
		3690	4099	4158	4325
		4464	4635	4795	4862
		4938	5918	6065	6091
		6281	6685	6719	6786
		6908	7035	7206	7283
		7305	7333	7464	7554
		7621	7802	8266	
MspA1 I	(13)	2552	2568	2710	2872
		3618	3645	3721	4222
		5098	6053	6298	7047
		7407			
Mun I	(2)	494	2666		
Nae I	(3)	4796	7803	8267	
Nar I	(3)	4261	7053	7301	
Nci I	(19)	655	1309	2419	2683
		2684	2863	2864	3209
		3601	3691	4100	4326
		4938	4939	6091	6787
		6908	7305	7465	
Nco I	(5)	1337	1588	2411	4196
		7733			
Nde I	(2)	1716	2051		
NgoM I	(3)	4794	7801	8265	
Nhe I	(1)	1357			
Nla III	(39)	162	642	687	882
		1077	1107	1341	1592
		1652	2218	2353	2407
		2415	2947	2997	3220
		3273	3337	3568	3763
		3778	3883	4038	4200
		4427	4461	4608	4614
		4678	4794	4860	5715
		6435	6994	7175	7520
		7706	7737	7763	
Nla IV	(31)	764	1302	1485	2443
		2867	2891	3050	3363
		3471	3492	3635	3669
		3745	3917	4057	4262
		4352	4639	5166	5532
		5743	5782	6554	6648
		6689	7054	7302	7337
		8203	8224	8236	
Nsi I	(2)	3161	3339		
Nsp7524 I	(8)	158	2403	3759	3774
		3879	4674	5711	7702
NspB II	(13)	2552	2568	2710	2872
		3618	3645	3721	4222
		5098	6053	6298	7047
		7407			
NspH I	(8)	162	2407	3763	3778
		3883	4678	5715	7706
Pac I	(2)	9	5526		
PaeR7 I	(1)	2255			
Pal I	(37)	285	765	877	1166
		1266	1675	1868	2227
		2417	2861	3094	3363
		3377	3443	3501	3669
		3746	4027	4114	4180
		4230	4351	4394	4789
		5198	5726	5737	5755
		6189	6647	6727	7209
		7383	7774	7801	8014
		8156			
PflM I	(1)	2913			
Ple I	(5)	623	1547	4873	6090
		8099			
Pme I	(1)	4523			
PpuM I	(2)	2890	4056		
Psp1406 I	(1)	6830			
PspA I	(3)	2682	2862	4937	
Pst I	(4)	2530	2557	2987	3720
Pvu II	(6)	2710	3618	3645	3721
		7047	7407		
Rsa I	(12)	209	628	910	1412
		1569	1620	1653	1708
		1733	2131	3997	7607
Rsr II	(1)	7817			
Sac I	(2)	2387	4390		
Sac II	(2)	2569	4223		
Sap I	(3)	5595	7645	7855	
Sau3A I	(35)	587	600	609	650
		688	836	1363	1954
		2716	2808	3018	3398
		3431	3561	3612	3950

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                        5530     6277     6352     6363
                        6371     6449     6461     6566
                        6850     6862     7114     7131
                        7142     7161     7472     7550
                        7631     7640     7718
Sau96 I         (29)    680      763      1164     1673
                        1866     2226     2415     2860
                        2866     2890     3093     3361
                        3362     3500     3667     3668
                        3744     3915     4025     4056
                        4134     4229     4350     5196
                        6646     6725     6742     7817
                        8155
ScrF I          (41)    655      927      981      1056
                        1168     1293     1309     1668
                        1861     2419     2683     2684
                        2863     2864     2908     3085
                        3209     3379     3424     3504
                        3601     3691     3910     4029
                        4100     4116     4182     4326
                        4381     4413     4938     4939
                        5739     5860     5873     6091
                        6787     6908     7305     7465
                        7688
Sec I           (37)    925      980      1004     1167
                        1307     1337     1588     2411
                        2418     2566     2682     2862
                        3084     3096     3208     3365
                        3378     3502     3503     3600
                        4028     4044     4115     4196
                        4220     4232     4250     4325
                        4850     4937     4938     5047
                        5871     6906     7110     7464
                        7733
SfaN I          (20)    429      846      945      960
                        1236     1590     3147     3167
                        3952     4344     4425     5549
                        5587     5807     7260     7515
                        7599     7663     7731     7938
Sfc I           (6)     2526     2553     2983     3716
                        5976     6167
Sma I           (3)     2684     2864     4939
SnaB I          (2)     1612     5354
Sph I           (3)     2407     3883     7706
Sty I           (10)    1337     1588     2411     3096
                        4196     4232     4250     5047
                        7110     7733
Swa I           (1)     1983
Taq I           (16)    823      952      967      994
                        1288     2024     2256     3949
                        5157     5811     7414     7570
                        7594     7630     7792     8197
Tfi I           (8)     2211     2672     3213     4321
                        4901     5686     7786     7920
Tsp45 I         (22)    77       109      183      218
                        663      1152     2117     2575
                        2922     3315     3928     4077
                        4479     4799     4817     5179
                        5330     5420     5452     7421
                        7727     8337
Tth111 I        (2)     2503     7419
Tth111 II       (10)    859      2622     2788     2827
                        3915     4686     6300     6309
                        6339     7737
Vsp I           (5)     5        2159     5003     5522
                        6776
Xba I           (2)     597      2267
Xca I           (1)     4508
Xcm I           (3)     2796     4387     7117
Xho I           (1)     2255
Xho II          (16)    600      609      836      1363
                        1954     2716     5530     6352
                        6363     6449     6461     6850
                        6862     7114     7472     7718
Xma I           (3)     2682     2862     4937
Xma III         (1)     7207
Xmn I           (1)     8385
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Site usage in pAdTrack-OMIR:

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Aat II      G,ACGT`C         4     Acc I       GT`MK,AC         2
Acc65 I     G`GTAC,C         -     Aci I       C`CG,C
107
Afe I       AGC|GCT          4     Afl II      C`TTAA,G         -
Afl III     A`CRYG,T         4     Age I       A`CCGG,T         1
Aha II      GR`CG,YC         8     Ahd I       GACNN,N`NNGTC    2
Alu I       AG|CT            46    Alw I       GGATC 8/9
27
AlwN I      CAG,NNN`CTG      6     Apa I       G,GGCC`C         2
ApaL I      G`TGCA,C         2     Apo I       R`AATT,Y         7
Asc I       GG`CGCG,CC       -     Ase I       AT`TA,AT         5
Asp718      G`GTAC,C         -     Ava I       C`YCGR,G         4
Ava II      G`GWC,C          8     Avr II      C`CTAG,G         1
BamH I      G`GATC,C         1     Ban I       G`GYRC,C
11
Ban II      G,RGCY`C         8     Bbe I       G,GCGC`C         3
Bbs I       GAAGAC 8/12      1     Bbv I       GCAGC 13/17
20
Bbv II      GAAGAC 7/11      1     Bcl I       T`GATC,A         2
Bcn I       CC,S`GG          19    Bfa I       C`TA,G
12
Bgl I       GCCN,NNN`NGGC    7     Bgl II      A`GATC,T         -
Blp I       GC`TNA,GC        -     Bpm I       CTGGAG 22/20     5
Bsa I       GGTCTC 7/11      5     BsaA I      YAC|GTR          7
BsaB I      GATNN|NNATC      3     BsaH I      GR`CG,YC         8
BsaJ I      C`CNNG,G         37    BsaW I      W`CCGG,W
10
BseR I      GAGGAG 16/14     4     Bsg I       GTGCAG 22/20     7
BsiC I      TT`CG,AA         -     BsiE I      CG,RY`CG         7
BsiHKA I    G,WGCW`C         9     BsiW I      C`GTAC,G         -
Bsm I       GAATG,C 7        4     BsmA I      GTCTC`/9
11
BsmB I      CGTCTC 7/11      2     BsmF I      GGGAC 15/19      8
BsoF I      GC`N,GC          68    Bsp120 I    G`GGCC,C         2
Bsp1286 I   G,DGCH`C         2     BspH I      T`CATG,A         1
BspM I      ACCTGC 10/14     8     BspM II     T`CCGG,A         3
Bsr I       ACT,GG`          19    BsrB I      GAG|CGG          4
BsrD I      GCAATG, 8        3     BsrG I      T`GTAC,A         2
BssH II     G`CGCG,C         5     BssS I      C`TCGT,G         5
Bst1107 I   GTA|TAC          1     BstB I      TT`CG,AA         -
BstE II     G`GTNAC,C        2     BstN I      CC`W,GG
22
BstU I      CG|CG            35    BstX I      CCAN,NNNN`NTGG   1
BstY I      R`GATC,Y         16    Bsu36 I     CC`TNA,GG        -
Cac8 I      GCN|NGC          54    Cfr10 I     R`CCGG,Y
11
Cla I       AT`CG,AT         -     Csp6 I      G`TA,C
12
Dde I       C`TNA,G          11    Dpn I       GA|TC
35
DpnII       `GATC,           35    Dra I       TTT|AAA          9
Dra III     CAC,NNN`GTG      1     Drd I       GACNN,NN`NNGTC   4
Dsa I       C`CRYG,G         9     Eae I       Y`GGCC,R
11
Eag I       C`GGCC,G         1     Ear I       CTCTTC 7/10      4
Eco47 III   AGC|GCT          4     Eco57 I     CTGAAG 21/19     9
Eco72 I     CAC|GTG          -     EcoN I      CCTNN`N,NNAGG    -
EcoO109 I   RG`GNC,CY        5     EcoR I      G`AATT,C         1
EcoR II     `CCWGG,          22    EcoR V      GAT|ATC          -
Ehe I       GGC|GCC          3     Esp I       GC`TNA,GC        -
Fnu4H I     GC`N,GC          68    Fok I       GGATG 14/18
19
Fse I       GG,CCGG`CC       -     Fsp I       TGC|GCA          2
Gdi II      `YGGC,CG         9     Gsu I       CTGGAG 21/19     5
Hae I       WGG|CCW          7     Hae II      R,GCGC`Y
12
Hae III     GG|CC            37    Hga I       GACGC 9/14       6
HgiA I      G,WGCW`C         9     HgiE II     ACCNNNNNNGGT -
1/132
Hha I       G,CG`C           55    HinC II     GTY|RAC          2
Hind II     GTY|RAC          2     HinD III    A`AGCT,T         1
Hinf I      G`ANT,C          20    HinI I      GR`CG,YC         8
HinP I      G`CG,C           55    Hpa I       GTT|AAC          1
Hpa II      C`CG,G           43    Hph I       GGTGA 12/11
19
Kas I       G`GCGC,C         3     Kpn I       G,GTAC`C         -
Mae I       C`TA,G           12    Mae II      A`CG,T
31
Mae III     `GTNAC,          39    Mbo I       `GATC,
35
Mbo II      GAAGA 12/11      18    Mlu I       A`CGCG,T         1
Mme I       TCCRAC 25/23     5     Mnl I       CCTC 10/10
55
Msc I       TGG|CCA          3     Mse I       T`TA,A
36
Msl I       CAYNN|NNRTG      5     Msp I       C`CG,G
43
MspA1 I     CMG|CKG          13    Mun I       C`AATT,G         2
Nae I       GCC|GGC          3     Nar I       GG`CG,CC         3
Nci I       CC`S,GG          19    Nco I       C`CATG,G         5
Nde I       CA`TA,TG         2     NgoM I      G`CCGG,C         3
Nhe I       G`CTAG,C         1     Nla III     ,CATG`
39
Nla IV      GGN|NCC          31    Not I       GC`GGCC,GC       -
Nru I       TCG|CGA          -     Nsi I       A,TGCA`T         2
Nsp7524 I   R`CATG,Y         8     NspB II     CMG|CKG
13
NspH I      R,CATG`Y         8     Pac I       TTA,AT`TAA       2
PaeR7 I     C`TCGA,G         1     Pal I       GG|CC
37
PflM I      CCAN,NNN`NTGG    1     Ple I       GAGTC 9/10       5
Pme I       CTTT|AAAC        1     Pml I       CAC|GTG          -
PpuM I      RG`GWC,CY        2     Psp1406 I   AA`CG,TT         1
PspA I      C`CCGG,G         3     Pst I       C,TGCA`G         4
Pvu I       CG,AT`CG         -     Pvu II      CAG|CTG          6
Rsa I       GT|AC            12    Rsr II      CG`GWC,CG        1
Sac I       G,AGCT`C         2     Sac II      CC,GC`GG         2
Sal I       G`TCGA,C         -     Sap I       GCTCTTC 8/11     3
Sau3A I     `GATC,           35    Sau96 I     G`GNC,C
29
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Sca I	AGT|ACT	-	ScrF I	CC`N,GG		Sty I	C`CWWG,G	10	Swa I	ATTT|AAAT	1
41						Taq I	T`CG,A	16	Tfi I	G`AWT,C	8
Sec I	C`CNNG,G	37	SfaN I	GCATC 9/13		Tsp45 I	`GTSAC,	22	Tth111 I	GACN`N,NGTC	2
20						Tth111 II	CAARCA 16/14	10	Vsp I	AT`TA,AT	5
Sfc I	C`TRYA,G	6	Sfi I	GGCCN,NNN`NGGCC	-	Xba I	T`CTAG,A	2	Xca I	GTA|TAC	1
Sma I	CCC|GGG	3	SnaB I	TAC|GTA	2	Xcm I	CCANNNN,N`NNNNTGG	3	Xho I	C`TCGA,G	1
Spe I	A`CTAG,T	-	Sph I	G,CATG`C	3	Xho II	R`GATC,Y	16	Xma I	C`CCGG,G	3
Spl I	C`GTAC,G	-	Srf I	GCCC|GGGC	-	Xma III	C`GGCC,G	1	Xmn I	GAANN|NNTTC	1
Ssp I	AAT|ATT	-	Stu I	AGG|CCT	-						