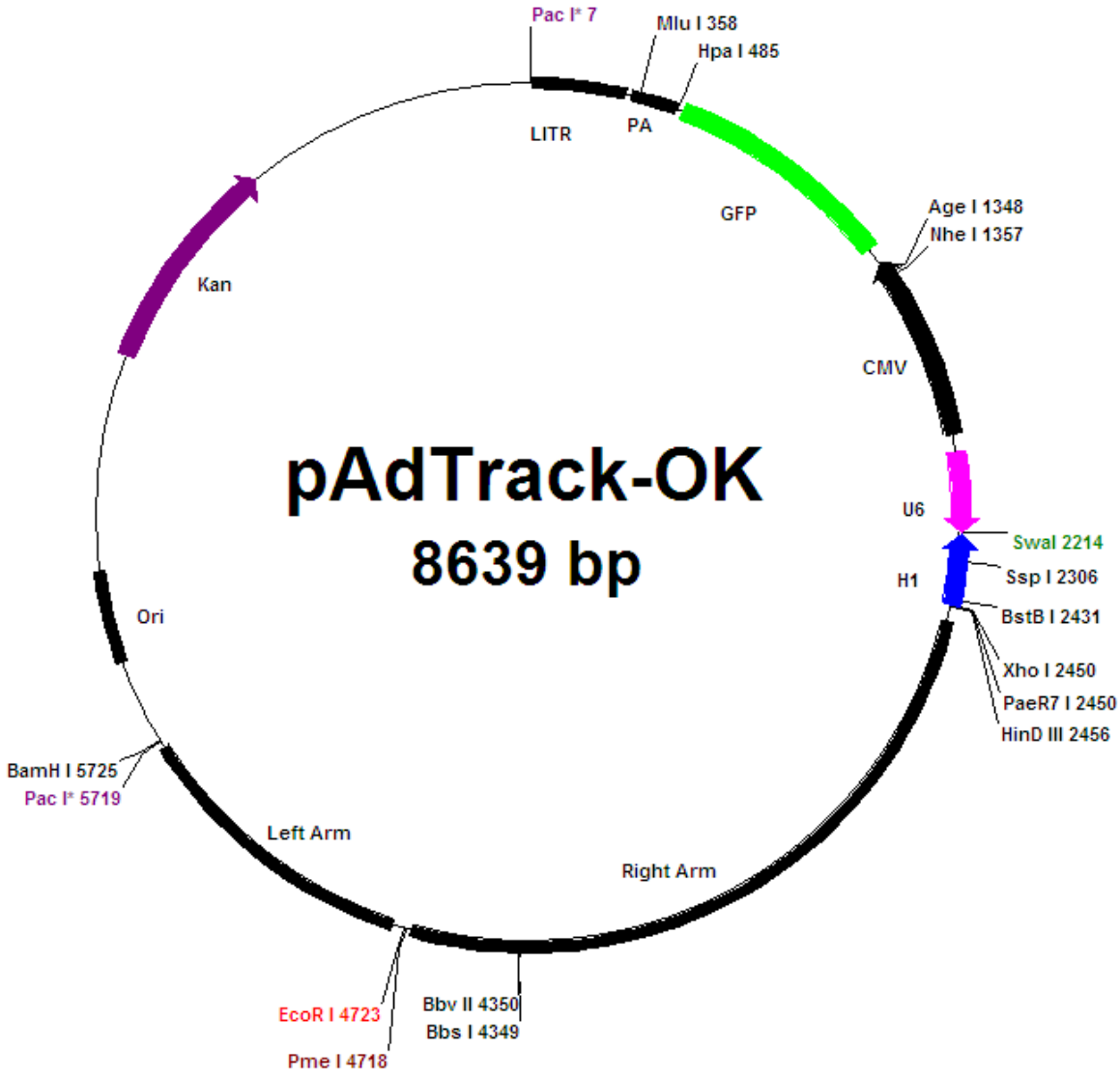
Vector: **pAdTrack-OK**

Antibiotic Selection: Kan

Creator(s): Fang Deng & Zhengjian Yan, Molecular Oncology Lab of The University of Chicago Medical Center

Date of Construction: October, 2013



pAdTrack-OK Full-Length Sequence

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Unique enzymes in pAdTrace-OK

Mlu I	A`CGCG,T	358
Hpa I	GTT|AAC	485
Age I	A`CCGG,T	1348
Nhe I	G`CTAG,C	1357
SwaI	ATTT|AAAT	2214
Ssp I	AAT|ATT	2306
BsiC I	TT`CG,AA	2431
BstB I	TT`CG,AA	2431
PaeR7 I	C`TCGA,G	2450
Xho I	C`TCGA,G	2450
HinD III	A`AGCT,T	2456
PflM I	CCAN,NNN`NTGG	3108
BstX I	CCAN,NNNN`NTGG	3547
Bbs I	GAAGAC 8/12	4349
Bbv II	GAAGAC 7/11	4350
Bst1107 I	GTA|TAC	4703
Xca I	GTA|TAC	4703
Pme I	CTTT|AAAC	4718
EcoR I	G`AATT,C	4723
Avr II	C`CTAG,G	5242
BamH I	G`GATC,C	5725
BspH I	T`CATG,A	6626
Psp1406 I	AA`CG,TT	7025
Eag I	C`GGCC,G	7402
Xma III	C`GGCC,G	7402
Rsr II	CG`GWC,CG	8012
Dra III	CAC,NNN`GTG	8359
Xmn I	GAANN|NNTTC	8580

Number of enzymes = 28

The following enzymes do not cut in pAdTrack-OK:

Acc65 I	Afl II	Asc I	Asp718	Bgl II
Blp I	BsiW 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	Spl I	Srf I

pAdTrack-OK: sites sorted by name:

Aat II	(5)	1509	1695	1778	1831
		2424			
Acc I	(2)	3764	4702		
Aci I	(110)	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	2376	2395	2410
		2535	2538	2541	2667
		2730	2733	2736	2745
		2757	2761	2763	2795
		2826	2830	2960	3049
		3067	3195	3313	3566
		3569	3654	3658	3675
		3771	3851	3990	4007
		4065	4108	4169	4179
		4415	4417	4459	4535
		4540	4549	4877	5149
		5263	5293	5468	5600
		5621	5639	5746	5772
		5789	5832	5839	5860
		5951	5979	6106	6125
		6246	6356	6491	6500
		6862	6953	7083	7206
		7302	7405	7468	7562
		7626	7727	7730	7970
		8010	8015	8065	8081
		8107	8249	8388	8503
		8530	8558		
Afl III	(4)	158	358	4869	5906
Age I	(1)	1348			
Aha II	(10)	1506	1692	1775	1828
		2315	2421	3503	4456
		7248	7496		
Ahd I	(2)	3067	6799		
Alu I	(47)	25	469	632	806
		917	965	1181	1214
		1286	1319	1386	2440
		2458	2580	2813	2905
		3185	3271	3321	3471
		3813	3840	3910	3916
		4119	4439	4496	4583
		4827	5042	5366	5848
		6074	6164	6210	6467
		6988	7117	7170	7196
		7242	7333	7602	8060
		8189	8407	8446	
Alw I	(26)	596	616	646	843
		1370	2918	3010	3209
		3600	3763	4141	5721
		5732	6468	6554	6554
		6651	6652	7052	7053
		7316	7333	7363	7674
		7741	7920		
AlwN I	(6)	2747	2905	2990	4711
		6322	7120		
Apa I	(3)	2395	3560	3866	
ApaL I	(2)	3446	6220		
Apo I	(7)	257	430	2209	3457
		4723	8161	8172	
Ase I	(5)	5	2041	5198	5717
		6971			
Ava I	(4)	2450	2877	3057	5132
Ava II	(8)	680	3061	3085	4110
		4251	4329	6937	8012
Avr II	(1)	5242			
BamH I	(1)	5725			
Ban I	(12)	1300	1483	2314	3243
		3664	4455	5359	6747
		7247	7495	7530	8396
Ban II	(9)	2395	2582	2639	2795
		3560	3866	4585	7861
		8434			
Bbe I	(4)	2318	4459	7251	7499
Bbs I	(1)	4349			
Bbv I	(20)	764	767	1190	2540
		2543	2735	2762	2822

		2914	3849	3865	3925
		4448	5308	6325	6328
		6534	7569	7611	8132
Bbv II	(1)	4350			
Bcl I	(2)	587	7337		
Bcn I	(19)	656	1310	2615	2879
		2880	3059	3060	3405
		3797	3887	4296	4522
		5134	5135	6287	6983
		7104	7501	7661	
Bfa I	(13)	397	598	1358	1949
		2380	2463	5243	6401
		6654	6989	7055	7197
		8510			
Bgl I	(7)	1672	1743	1865	2939
		4990	6919	8579	
Bpm I	(5)	657	897	2623	5251
		6869			
Bsa I	(6)	2226	2687	3075	4051
		4563	6860		
BsaA I	(7)	1612	2080	3338	5549
		7069	7800	8359	
BsaB I	(3)	586	3002	7355	
BsaH I	(10)	1506	1692	1775	1828
		2315	2421	3503	4456
		7248	7496		
BsaJ I	(39)	925	980	1004	1167
		1307	1337	1588	2350
		2403	2606	2613	2761
		2877	3057	3279	3291
		3403	3560	3573	3697
		3698	3795	4223	4239
		4310	4391	4415	4427
		4445	4520	5045	5132
		5133	5242	6066	7101
		7305	7659	7928	
BsaW I	(10)	603	618	1348	3442
		4829	5056	6112	6259
		7229	7527		
BseR I	(4)	1311	4149	4465	5034
Bsg I	(7)	792	1116	1213	2829
		3439	4494	5419	
BsiC I	(1)	2431			
BsiE I	(7)	1349	3077	5123	5822
		6246	7405	8392	
BsiHKA I	(9)	734	2552	2582	3450
		4210	4585	6224	7609
		7799			
Bsm I	(4)	406	499	3532	4563
BsmA I	(12)	1515	2225	2688	2712
		3074	3158	3495	4052
		4562	5155	6861	7339
BsmB I	(2)	3159	3494		
BsmF I	(9)	1454	1622	1773	2313
		3074	3943	4096	4680
		7647			
BsoF I	(68)	470	659	753	756
		807	814	1098	1120
		1179	2529	2532	2535
		2538	2541	2724	2733
		2736	2745	2748	2751
		2811	2903	3193	3567
		3570	3838	3841	3854
		3911	3914	3917	4007
		4180	4299	4350	4418
		4437	4459	4540	4748
		5294	5297	5812	5830
		5833	5951	6106	6249
		6314	6317	6523	6851
		7302	7405	7457	7468
		7558	7563	7600	7641
		7728	7731	7734	7970
		8066	8107	8121	8539
Bsp120 I	(3)	2391	3556	3862	
Bsp1286 I	(2)	2552	7799		
BspH I	(1)	6626			
BspM I	(8)	2914	3776	3816	4136
		4810	7154	7383	7764
BspM II	(3)	618	4829	5056	
Bsr I	(20)	729	1658	2392	3218
		3898	5013	5318	6313
		6326	6440	6846	6964
		7007	7079	7124	7205
		7289	7439	7640	8273
BsrB I	(5)	2410	5265	5839	8109
		8503			
BsrD I	(3)	3558	6860	7729	
BsrG I	(2)	207	626		
BssH II	(6)	2361	3043	3045	4301
		4432	8560		
BssS I	(5)	1155	4462	4569	6079
		8088			
Bst1107 I	(1)	4703			
BstB I	(1)	2431			
BstE II	(2)	4123	5012		
BstN I	(23)	927	981	1056	1168
		1293	1668	1861	2351
		3103	3280	3574	3619
		3699	4105	4224	4311
		4377	4576	4608	5934
		6055	6068	7883	
BstU I	(38)	88	231	233	294
		350	360	693	1011
		1892	2361	2363	2397
		2596	2763	2832	3045
		3047	3049	3654	4169
		4303	4369	4417	4434
		4504	4537	4774	5474
		5641	5953	6534	6864
		7562	7863	8251	8543
		8560	8562		
BstX I	(1)	3547			
BstY I	(15)	600	609	836	1363
		2911	5725	6547	6558
		6644	6656	7045	7057
		7309	7667	7913	
Cac8 I	(57)	804	811	1135	1183
		1216	1359	1673	1866
		2359	2363	2395	2600
		2667	2761	2795	2799
		2803	2830	2921	3045
		3047	3269	3287	3656
		4004	4076	4303	4307
		4434	4441	4544	4991
		5153	5472	5837	5923
		5960	6520	6911	7148
		7172	7223	7240	7390
		7576	7795	7861	7867
		7895	7899	7940	7944
		7998	8462	8505	8519
		8562			
Cfr10 I	(11)	202	1185	1348	3856
		4352	4658	4989	6879
		7815	7996	8460	
Csp6 I	(12)	208	627	909	1411
		1568	1619	1652	1707
		1732	2070	4191	7801
Dde I	(11)	613	715	733	2789
		2898	3472	3833	3929
		6181	6590	6756	
Dpn I	(34)	589	602	611	652
		690	838	1365	2913
		3005	3215	3595	3628
		3758	3809	4147	5727
		6474	6549	6560	6568
		6646	6658	6763	7047
		7059	7311	7328	7339
		7358	7669	7747	7828
		7837	7915		
DpnII	(34)	587	600	609	650
		688	836	1363	2911
		3003	3213	3593	3626
		3756	3807	4145	5725
		6472	6547	6558	6566
		6644	6656	6761	7045
		7057	7309	7326	7337
		7356	7667	7745	7826
		7835	7913		
Dra I	(9)	546	2122	2135	2214
		2966	4718	4921	6665
		6684			
Dra III	(1)	8359			
Drd I	(4)	4395	6014	7523	8314
Dsa I	(9)	1337	1588	2606	2761
		3560	4239	4391	4415
		7928			
Eae I	(11)	283	875	1264	4307
		4373	4587	4982	7402
		7576	7967	7994	
Eag I	(1)	7402			
Ear I	(4)	1963	5790	7840	8050
Eco47 III	(4)	1356	3233	4348	5284
Eco57 I	(9)	946	1143	1189	2725
		2956	4362	6453	7641
		8073			
EcoO109 I	(5)	1973	3085	3288	4251
		4545			
EcoR I	(1)	4723			
EcoR II	(23)	925	979	1054	1166
		1291	1666	1859	2349
		3101	3278	3572	3617
		3697	4103	4222	4309
		4375	4574	4606	5932
		6053	6066	7881	
Ehe I	(4)	2316	4457	7249	7497
Fnu4H I	(68)	470	659	753	756
		807	814	1098	1120
		1179	2529	2532	2535
		2538	2541	2724	2733
		2736	2745	2748	2751
		2811	2903	3193	3567
		3570	3838	3841	3854
		3911	3914	3917	4007
		4180	4299	4350	4418
		4437	4459	4540	4748
		5294	5297	5812	5830
		5833	5951	6106	6249
		6314	6317	6523	6851
		7302	7405	7457	7468
		7558	7563	7600	7641
		7728	7731	7734	7970
		8066	8107	8121	8539
Fok I	(19)	184	258	942	1308
		2809	3139	3338	3634
		3676	3910	4518	6765
		6946	7118	7301	7363

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            7820    7845    8209
Fsp I     (2)  7021    7598
Gdi II    (9)  876     1263    4374    4586
            4983    7401    7403    7966
            7993
Gsu I     (5)  658     898     2624    5252
            6870
Hae I     (7)  285     3638    4309    5921
            5932    6384    7578
Hae II    (13) 1358    2318    3235    4003
            4350    4459    5286    5784
            6154    7251    7499    8510
            8518
Hae III   (38) 285     765     877     1166
            1266    1675    1868    1975
            2393    2612    3056    3289
            3558    3572    3638    3696
            3864    3941    4222    4309
            4375    4425    4546    4589
            4984    5393    5921    5932
            5950    6384    6842    6922
            7404    7578    7969    7996
            8209    8351
Hga I     (6)  1422    2610    3510    4359
            6016    6594
HgiA I    (9)  734     2552    2582    3450
            4210    4585    6224    7609
            7799
HgiE II   (2)  3848    6485
Hha I     (59) 88      202     233     350
            695     1011    1052    1357
            2317    2357    2363    2365
            2598    2919    3045    3047
            3049    3234    3654    4002
            4247    4291    4303    4305
            4319    4349    4369    4434
            4436    4458    4504    4539
            4776    5285    5643    5783
            5816    6086    6153    6253
            6427    6536    6929    7022
            7152    7250    7321    7490
            7498    7562    7599    7865
            8125    8509    8517    8543
            8562    8564    8573
HinC II   (2)  485     2844
Hind II   (2)  485     2844
HinD III  (1)  2456
Hinf I    (22) 615     1539    1988    2241
            2399    2867    2987    3120
            3408    3964    4516    5060
            5074    5096    5806    5881
            6277    6794    7981    8115
            8286    8308
HinI I    (10) 1506    1692    1775    1828
            2315    2421    3503    4456
            7248    7496
HinP I    (59) 86      200     231     348
            693     1009    1050    1355
            2315    2355    2361    2363
            2596    2917    3043    3045
            3047    3232    3652    4000
            4245    4289    4301    4303
            4317    4347    4367    4432
            4434    4456    4502    4537
            4774    5283    5641    5781
            5814    6084    6151    6251
            6425    6534    6927    7020
            7150    7248    7319    7488
            7496    7560    7597    7863
            8123    8507    8515    8541
            8560    8562    8571
Hpa I     (1)  485
Hpa II    (43) 203     604     619     655
            1186    1246    1309    1349
            2613    2878    3058    3403
            3443    3693    3795    3857
            3885    4294    4353    4520
            4659    4830    4990    5057
            5133    6113    6260    6286
            6476    6880    6914    6981
            7103    7230    7401    7478
            7500    7528    7659    7749
            7816    7997    8461
Hph I     (20) 120     841     970     994
            1322    1327    1578    2284
            3128    4118    4289    4589
            4685    5007    5610    6643
            6870    7044    7675    8361
Kas I     (4)  2314    4455    7247    7495
Mae I     (13) 397     598     1358    1949
            2380    2463    5243    6401
            6654    6989    7055    7197
            8510
Mae II    (33) 81      113     187     889
            1060    1273    1506    1611
            1692    1775    1816    1828
            2079    2084    2265    2421
            3107    3337    3602    5431
            5543    5548    5614    5646
            6609    7025    7068    7612
            7799    8303    8315    8358
            8468
Mae III   (40) 77      109     183     218
            266     337     455     663
            1152    1450    1799    1886
            2080    2159    2382    2770
            3117    3510    3708    4123
            4272    4674    4994    5012
            5374    5432    5525    5544
            5549    5593    5615    5647
            6262    6325    6441    6724
            7616    7922    8532    8544
Mbo I     (34) 587     600     609     650
            688     836     1363    2911
            3003    3213    3593    3626
            3756    3807    4145    5725
            6472    6547    6558    6566
            6644    6656    6761    7045
            7057    7309    7326    7337
            7356    7667    7745    7826
            7835    7913
Mbo II    (19) 856     1049    1052    1097
            1979    2335    3501    3591
            3792    3829    4350    5778
            6567    6640    7041    7856
            8066    8148    8498
Mlu I     (1)  358
Mme I     (5)  2695    2890    6120    6304
            8335
Mnl I     (56) 56      304     521     530
            569     830     950     1001
            1013    1151    1244    1250
            1331    1411    1964    2340
            2458    2736    2955    2960
            3075    3159    3409    3524
            3654    3723    4169    4263
            4316    4421    4443    4446
            4458    4478    4651    4779
            5054    5177    5244    5268
            5526    5673    5804    6014
            6087    6338    6738    6819
            6965    7261    7347    7411
            7547    7904    8096    8387
Msc I     (3)  285     4309    7578
Mse I     (37) 5       9       363     484
            545     1943    2041    2121
            2134    2213    2436    2886
            2965    3317    3902    3950
            4717    4920    5023    5198
            5337    5440    5563    5717
            5721    6612    6664    6669
            6683    6736    6971    7010
            8169    8181    8198    8296
            8566
Msl I     (5)  1587    3545    3610    4804
            7933
Msp I     (43) 203     604     619     655
            1186    1246    1309    1349
            2613    2878    3058    3403
            3443    3693    3795    3857
            3885    4294    4353    4520
            4659    4830    4990    5057
            5133    6113    6260    6286
            6476    6880    6914    6981
            7103    7230    7401    7478
            7500    7528    7659    7749
            7816    7997    8461
MspA1 I   (13) 2747    2763    2905    3067
            3813    3840    3916    4417
            5293    6248    6493    7242
            7602
Mun I     (2)  494     2861
Nae I     (3)  4991    7998    8462
Nar I     (4)  2315    4456    7248    7496
Nci I     (19) 655     1309    2614    2878
            2879    3058    3059    3404
            3796    3886    4295    4521
            5133    5134    6286    6982
            7103    7500    7660
Nco I     (5)  1337    1588    2606    4391
            7928
Nde I     (2)  1716    2149
NgoM I    (3)  4989    7996    8460
Nhe I     (1)  1357
Nla III   (40) 162     642     687     882
            1077    1107    1341    1592
            1652    1988    2301    2548
            2602    2610    3142    3192
            3415    3468    3532    3763
            3958    3973    4078    4233
            4395    4622    4656    4803
            4809    4873    4989    5055
            5910    6630    7189    7370
            7715    7901    7932    7958
Nla IV    (33) 764     1302    1485    2316
            2393    2638    3062    3086
            3245    3558    3666    3687
            3830    3864    3940    4112
            4252    4457    4547    4834
            5361    5727    5938    5977
            6749    6843    6884    7249
            7497    7532    8398    8419
            8431
Nsi I     (2)  3356    3534
Nsp7524 I (9)  158     2297    2598    3954
            3969    4074    4869    5906
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                7897
NspB II     (13) 2747    2763    2905    3067
                3813    3840    3916    4417
                5293    6248    6493    7242
                7602
NspH I       (9)  162    2301    2602    3958
                3973    4078    4873    5910
                7901
PacI         (2)    7    5719
PaeR7 I      (1) 2450
Pal I       (38)  285     765     877    1166
                1266    1675    1868    1975
                2393    2612    3056    3289
                3558    3572    3638    3696
                3864    3941    4222    4309
                4375    4425    4546    4589
                4984    5393    5921    5932
                5950    6384    6842    6922
                7404    7578    7969    7996
                8209    8351
PflM I       (1)  3108
Ple I        (5)  623     1547    5068    6285
                8294
Pme I        (1)  4718
PpuM I       (2)  3085    4251
Psp1406 I    (1)  7025
PspA I       (3)  2877    3057    5132
Pst I        (4)  2725    2752    3182    3915
Pvu II       (6)  2905    3813    3840    3916
                7242    7602
Rsa I       (12)  209     628     910    1412
                1569    1620    1653    1708
                1733    2071    4192    7802
Rsr II       (1)  8012
Sac I        (2)  2582    4585
Sac II       (2)  2764    4418
Sap I        (3)  5790    7840    8050
Sau3A I     (34)  587     600     609     650
                688     836    1363    2911
                3003    3213    3593    3626
                3756    3807    4145    5725
                6472    6547    6558    6566
                6644    6656    6761    7045
                7057    7309    7326    7337
                7356    7667    7745    7826
                7835    7913
Sau96 I     (31)  680     763    1164    1673
                1866    1973    2391    2392
                2610    3055    3061    3085
                3288    3556    3557    3695
                3862    3863    3939    4110
                4220    4251    4329    4424
                4545    5391    6841    6920
                6937    8012    8350
ScrF I      (42)  655     927     981    1056
                1168    1293    1309    1668
                1861    2351    2614    2878
                2879    3058    3059    3103
                3280    3404    3574    3619
                3699    3796    3886    4105
                4224    4295    4311    4377
                4521    4576    4608    5133
                5134    5934    6055    6068
                6286    6982    7103    7500
                7660    7883
Sec I       (39)  925     980    1004    1167
                1307    1337    1588    2350
                2403    2606    2613    2761
                2877    3057    3279    3291
                3403    3560    3573    3697
                3698    3795    4223    4239
                4310    4391    4415    4427
                4445    4520    5045    5132
                5133    5242    6066    7101
                7305    7659    7928
SfaN I      (20)  429     846     945     960
                1236    1590    3342    3362
                4147    4539    4620    5744
                5782    6002    7455    7710
                7794    7858    7926    8133
Sfc I        (6) 2721    2748    3178    3911
                6171    6362
Sma I        (3)  2879    3059    5134
SnaB I       (2)  1612    5549
Sph I        (3)  2602    4078    7901
Ssp I        (1)  2306
Sty I       (11)  1337    1588    2403    2606
                3291    4391    4427    4445
                5242    7305    7928
SwaI         (1)  2214
Taq I       (17)  823     952     967     994
                1288    2176    2431    2451
                4144    5352    6006    7609
                7765    7789    7825    7987
                8392
Tfi I       (10)  1988    2241    2399    2867
                3408    4516    5096    5881
                7981    8115
Tsp45 I     (23)  77      109     183     218
                663    1152    2080    2382
                2770    3117    3510    4123
                4272    4674    4994    5012
                5374    5525    5615    5647
                7616    7922    8532
Tth111 I     (2)  2698    7614
Tth111 II   (10)  859     2817    2983    3022
                4110    4881    6495    6504
                6534    7932
Vsp I        (5)  5       2041    5198    5717
                6971
Xba I        (2)  597     2462
Xca I        (1)  4703
Xcm I        (3)  2991    4582    7312
Xho I        (1)  2450
Xho II      (15)  600     609     836     1363
                2911    5725    6547    6558
                6644    6656    7045    7057
                7309    7667    7913
Xma I        (3)  2877    3057    5132
Xma III      (1)  7402
Xmn I        (1)  8580

Site usage in pAdTrack-OK:

Aat II     G,ACGT`C        5    Acc I      GT`MK,AC        2
Acc65 I    G`GTAC,C        -    Aci I      C`CG,C        110
Afl II     C`TTAA,G        -    Afl III    A`CRYG,T        4
Age I      A`CCGG,T        1    Aha II     GR`CG,YC       10
Ahd I      GACNN,N`NNGTC   2    Alu I      AG|CT          47
Alw I      GGATC 8/9      26    AlwN I     CAG,NNN`CTG     6
Apa I      G,GGCC`C        3    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       12    Ban II     G,RGCY`C        9
Bbe I      G,GCGC`C        4    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         13    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     6
BsaA I     YAC|GTR         7    BsaB I     GATNN|NNATC     3
BsaH I     GR`CG,YC       10    BsaJ I     C`CNNG,G       39
BsaW I     W`CCGG,W       10    BseR I     GAGGAG 16/14    4
Bsg I      GTGCAG 22/20    7    BsiC I     TT`CG,AA        1
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       12    BsmB I     CGTCTC 7/11     2
BsmF I     GGGAC 15/19     9    BsoF I     GC`N,GC        68
Bsp120 I   G`GGCC,C        3    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`        20
BsrB I     GAG|CGG         5    BsrD I     GCAATG, 8       3
BsrG I     T`GTAC,A        2    BssH II    G`CGCG,C        6
BssS I     C`TCGT,G        5    Bst1107 I  GTA|TAC         1
BstB I     TT`CG,AA        1    BstE II    G`GTNAC,C       2
BstN I     CC`W,GG        23    BstU I     CG|CG          38
BstX I     CCAN,NNNN`NTGG  1    BstY I     R`GATC,Y       15
Bsu36 I    CC`TNA,GG       -    Cac8 I     GCN|NGC        57
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          34    DpnII      `GATC,         34
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   -    Eco0109 I  RG`GNC,CY       5
EcoR I     G`AATT,C        1    EcoR II    `CCWGG,        23
EcoR V     GAT|ATC         -    Ehe I      GGC|GCC         4
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       13    Hae III    GG|CC          38
Hga I      GACGC 9/14      6    HgiA I     G,WGCW`C        9
HgiE II    ACCNNNNNNGGT -1/132   Hha I      G,CG`C         59
HinC II    GTY|RAC         2    Hind II    GTY|RAC         2
HinD III   A`AGCT,T        1    Hinf I     G`ANT,C        22
HinI I     GR`CG,YC       10    HinP I     G`CG,C         59
Hpa I      GTT|AAC         1    Hpa II     C`CG,G         43
Hph I      GGTGA 12/11    20    Kas I      G`GCGC,C        4
Kpn I      G,GTAC`C        -    Mae I      C`TA,G         13
Mae II     A`CG,T         33    Mae III    `GTNAC,        40
Mbo I      `GATC,         34    Mbo II     GAAGA 12/11    19
Mlu I      A`CGCG,T        1    Mme I      TCCRAC 25/23    5
Mnl I      CCTC 10/10     56    Msc I      TGG|CCA         3
Mse I      T`TA,A         37    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        4    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`         40    Nla IV     GGN|NCC        33
Not I      GC`GGCC,GC      -    Nru I      TCG|CGA         -
Nsi I      A,TGCA`T        2    Nsp7524 I  R`CATG,Y        9
NspB II    CMG|CKG        13    NspH I     R,CATG`Y        9
PacI       TTA`AT,TAA      2    PaeR7 I    C`TCGA,G        1
Pal I      GG|CC          38    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
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Sac II	CC,GC`GG	2	Sal I	G`TCGA,C	-
Sap I	GCTCTTC 8/11	3	Sau3A I	`GATC,	34
Sau96 I	G`GNC,C	31	Sca I	AGT|ACT	-
ScrF I	CC`N,GG	42	Sec I	C`CNNG,G	39
SfaN I	GCATC 9/13	20	Sfc I	C`TRYA,G	6
Sfi I	GGCCN,NNN`NGGCC	-	Sma I	CCC|GGG	3
SnaB I	TAC|GTA	2	Spe I	A`CTAG,T	-
Sph I	G,CATG`C	3	Spl I	C`GTAC,G	-
Srf I	GCCC|GGGC	-	Ssp I	AAT|ATT	1
Stu I	AGG|CCT	-	Sty I	C`CWWG,G	11
SwaI	ATTT|AAAT	1	Taq I	T`CG,A	17
Tfi I	G`AWT,C	10	Tsp45 I	`GTSAC,	23
Tth111 I	GACN`N,NGTC	2	Tth111 II	CAARCA 16/14	10
Vsp I	AT`TA,AT	5	Xba I	T`CTAG,A	2
Xca I	GTA|TAC	1	Xcm I	CCANNNN,N`NNNNTGG	3
Xho I	C`TCGA,G	1	Xho II	R`GATC,Y	15
Xma I	C`CCGG,G	3	Xma III	C`GGCC,G	1