

## pTurboRFP-PRL vector

## restriction table

Enzyme Name	Sequence	Count	Cutting Position				
AatI	AGG!CCT	1	1973				
AatII	GACGT!C	0					
Acc65I	G!GTACC	1	64				
AccI	GT!MKAC	1	59				
AccII	CG!CG	16	70	510	801	1076	1452
			1472	1496	1527	2218	2519
			2957	3041	3104	3173	3446
			4027				
AccIII	T!CCGGA	0					
AciI	G!CGG	26	70	240	510	552	594
			795	1412	1439	1527	1637
			2218	2282	2383	2386	2666
			2721	2819	2957	3104	3244
			3487	3732	3853	3872	3999
			4027				
AciI	C!CGC	29	68	405	543	645	799
			1467	1470	1484	1574	1822
			1834	1843	1855	1865	1876
			1922	2061	2124	2626	2671
			2737	2763	2888	2891	3039
			3171	3478	3622	4118	
AcyI	GR!CGYC	3	2152	2854	2933		
AfaI	GT!AC	6	66	137	287	539	758
			2458				
AflI	G!GWCC	3	682	2668	3113		
AflII	C!TTAAG	1	1034				
AflIII	A!CRYGT	1	4070				
AgeI	A!CCGGT	1	85				
AhaI	CC!SGG	7	76	77	666	2156	2316
			2929	3693			
AhaII	GR!CGYC	3	2152	2854	2933		
AhaIII	TTT!AAA	3	854	3296	3315		
AluI	AG!CT	18	37	43	106	133	279
			423	586	931	1098	1355
			1650	1938	2258	2716	3513
			3770	3816	3906		
Alw44I	G!TGCAC	2	172	3756			
AlwI	GGATCNNNN!	8	87	2020	2331	2577	2969
			3328	3426	3512		
AlwI	!NNNNNGATCC	6	74	627	2396	2940	3327
			3424				
AlwNI	CAGNNN!CTG	2	3253	3661			
AocI	CC!TNAGG	3	351	1632	3264		
AocII	GDGCH!C	14	39	76	149	176	209
			786	1343	2098	2191	2265
			2455	2517	3227	3760	
Aor51HI	AGC!GCT	1	15				
AosI	TGC!GCA	1	2254				
AosII	GR!CGYC	3	2152	2854	2933		
ApaI	GGGCC!C	1	76				
ApaLI	G!TGCAC	2	172	3756			
ApoI	R!AATTY	4	48	966	1070	1081	
ApyI	CC!WGG	12	269	317	413	1688	1743
			1760	2539	3118	3221	3911
			3924	4045			
AquI	C!YCGRG	2	32	75			

AscI	GG!CGCGCC	0						
AseI	AT!TAAT	0						
AsnI	AT!TAAT	0						
Asp700I	GAANN!NNTTC	0						
Asp718I	G!GTACC	1	64					
AspHI	GWGCW!C	5	39	176	2265	2455	3760	
AspI	GACN!NNGTC	1	2270					
AsuI	G!GNCC	12	72	73	242	485	577	
			682	1259	2668	3113	3159	
			3217	3250				
AsuII	TT!CGAA	2	46	2834				
AvaI	C!YCGRG	2	32	75				
AvaII	G!GWCC	3	682	2668	3113			
AvaIII	ATGCA!T	3	1724	1796	4127			
AviII	TGC!GCA	1	2254					
AvrI	!CYCGRG	2	31	74				
AvrII	C!CTAGG	2	1974	2989				
AxyI	CC!TNAGG	3	351	1632	3264			
BalI	TGG!CCA	2	752	2234				
BamHI	G!GATCC	1	79					
BanI	G!GYRCC	6	64	146	206	1305	2151	
			2186					
BanII	GRGCY!C	5	39	76	1343	2517	3227	
BanIII	AT!CGAT	1	1992					
BbeI	GGCGC!C	1	2155					
BbiII/AcyI	GR!CGYC	3	2152	2854	2933			
BbrPI	CAC!GTG	0						
BbsI	!GTCTTC	0						
BbsI	!GAAGAC	1	385					
BbvI	GCAGCNNNNNNN!	8	303	745	940	2225	2267	
			2788	3241	3741			
BbvI	!NNNNNNNNNNNGCTGC	8	422	1434	2099	2283	2376	
			3442	3648	3651			
BbvII	GAAGACNN!	1	393					
BbvII	!NNNNNNGTCTTC	0						
BcefI	ACGGCNNNNNNNNNN!	6	304	448	499	565	2578	
			3065					
BcefI	!NNNNNNNNNNNGCCGT	3	1294	2112	3571			
BcgI	!GCANNNNNNTCG	0						
BcgI	!CGANNNNNNTGC	0						
BclI	T!GATCA	1	108					
BcnI	CC!SGG	7	76	77	666	2156	2316	
			2929	3693				
BfaI	C!TAG	9	11	771	807	1001	1419	
			1975	2990	3324	3577		
BfrI	C!TTAAG	1	1034					
BglI	GCCNNNN!NGGC	2	561	1927				
BglII	A!GATCT	1	28					
BinI	!NNNNNGATCC	6	74	627	2396	2940	3327	
			3424					
BinI	GGATCNNNN!	8	87	2020	2331	2577	2969	
			3328	3426	3512			
BlnI	C!CTAGG	2	1974	2989				
BmyI	GDGCH!C	14	39	76	149	176	209	
			786	1343	2098	2191	2265	
			2455	2517	3227	3760		
BpmI	!CTCCAG	1	2949					
BpmI	!CTGGAG	1	2970					
Bpu1102I	GC!TNAGC	0						

BsaAI	YAC!GTR	2	1268	2456			
BsaBI	GATNN!NNATC	2	814	2011			
BsaHI	GR!CGYC	3	2152	2854	2933		
BsaI	GGTCTCN!	0					
BsaI	!NNNNNGAGACC	2	713	3141			
BsaJI	C!CNNGG	20	68	75	180	315	316
			411	1686	1758	1881	1916
			1925	1974	2315	2584	2989
			3116	3117	3219	3220	3910
BseAI	T!CCGGA	0					
BsePI	!GCGCGC	0					
BsgI	!GTGCAG	0					
BsgI	!CTGCAC	1	604				
BsiEI	CGRY!CG	4	90	799	2061	3736	
BsiWI	C!GTACG	0					
BsiYI	CCNNNNN!NNGG	23	203	316	482	548	679
			691	1164	1490	1882	2133
			2677	2958	2990	2991	3122
			3157	3207	3208	3239	3592
			3871	4037	4055		
BslI	CCNNNNN!NNGG	23	203	316	482	548	679
			691	1164	1490	1882	2133
			2677	2958	2990	2991	3122
			3157	3207	3208	3239	3592
			3871	4037	4055		
BsmAI	!GTCTC	0					
BsmAI	!GAGAC	5	718	1581	1999	3018	3146
BsmI	GAATGCN!	1	903				
BsmI	G!CATTC	1	996				
Bsp1286I	GDGCH!C	14	39	76	149	176	209
			786	1343	2098	2191	2265
			2455	2517	3227	3760	
BspDI	AT!CGAT	1	1992				
BspEI	T!CCGGA	0					
BspHI	T!CATGA	2	1578	3350			
BspMI	ACCTGCNNNN!	3	612	2420	2870		
BspMI	!NNNNNNNNGCAGGT	1	2039				
BspMII	T!CCGGA	0					
BspWI	GCNNNNN!NNGC	24	130	561	1379	1409	1436
			1478	1480	1719	1791	1842
			1921	1927	2143	2227	2250
			2389	2395	2512	2595	2862
			3049	3253	3452	4024	
BsrFI	R!CCGGY	5	85	1369	2471	2652	2935
BsrI	ACTGGN!	5	696	783	2096	2297	3543
BsrI	C!CAGT	4	1181	1859	3655	3668	
BssHII	G!GCGCGC	0					
Bst1107I	GTA!TAC	0					
BstBI	TT!CGAA	2	46	2834			
BstEII	G!GTNACC	0					
BstI	G!GATCC	1	79				
BstNI	CC!WGG	12	269	317	413	1688	1743
			1760	2539	3118	3221	3911
			3924	4045			
BstPI	G!GTNACC	0					
BstUI	CG!CG	16	70	510	801	1076	1452
			1472	1496	1527	2218	2519
			2957	3041	3104	3173	3446
			4027				

BstXI	CCANNNNN!NTGG	0						
BstYI	R!GATCY	10	28	79	632	2323	2569	
			2961	3320	3332	3418	3429	
Bsu36I	CC!TNAGG	3	351	1632	3264			
CbiI	TT!CGAA	2	46	2834				
CcrI	C!TCGAG	1	32					
CelII	GC!TNAGC	0						
CfoI	GCG!C	21	16	1418	1426	1452	1474	
			1483	1496	1527	2146	2154	
			2218	2255	2521	2781	2957	
			3043	3446	3555	3729	3829	
			3896					
Cfr10I	R!CCGGY	5	85	1369	2471	2652	2935	
Cfr13I	G!GNCC	12	72	73	242	485	577	
			682	1259	2668	3113	3159	
			3217	3250				
Cfr9I	C!CCGGG	1	75					
CfrI	Y!GGCCR	6	750	796	2058	2232	2623	
			2650					
ClaI	AT!CGAT	1	1992					
CpoI	CG!GWCCG	1	2668					
Csp45I	TT!CGAA	2	46	2834				
CspI	CG!GSCCG	0						
CviJI	RG!CY	93	37	43	74	106	133	
			196	243	272	279	299	
			357	423	435	486	513	
			521	555	564	570	578	
			586	600	669	710	746	
			752	798	821	931	1098	
			1118	1260	1341	1355	1369	
			1650	1691	1763	1886	1915	
			1921	1930	1938	1961	1973	
			1979	2060	2077	2085	2112	
			2137	2221	2230	2234	2258	
			2296	2372	2389	2408	2471	
			2515	2525	2542	2625	2652	
			2656	2693	2716	2732	2912	
			2939	3000	3122	3161	3218	
			3225	3232	3251	3262	3513	
			3542	3585	3596	3661	3740	
			3765	3770	3816	3906	4004	
			4030	4048	4059			
CvnI	CC!TNAGG	3	351	1632	3264			
DdeI	C!TNAG	10	25	351	557	648	1632	
			1934	2815	3264	3387	3796	
DpnI	GA!TC	23	30	81	110	224	458	
			634	811	1991	1995	2014	
			2325	2403	2484	2493	2571	
			2947	2963	3322	3334	3412	
			3420	3431	3506			
DpnII	!GATC	23	28	79	108	222	456	
			632	809	1989	1993	2012	
			2323	2401	2482	2491	2569	
			2945	2961	3320	3332	3410	
			3418	3429	3504			
DraI	TTT!AAA	3	854	3296	3315			
DraII	RG!GNCCY	1	3250					
DraIII	CACNNN!GTG	2	679	1268				
DrdI	GACNNNN!NNGTC	3	1223	2179	3968			

DsaI	C!CRYGG	3	68	1881	2584		
DsaV	!CCNGG	19	74	75	267	315	411
			664	1686	1741	1758	2154
			2314	2537	2927	3116	3219
			3691	3909	3922	4043	
EaeI	Y!GGCCR	6	750	796	2058	2232	2623
			2650				
EagI	C!GGCCG	2	796	2058			
Eam1105I	GACNNN!NNGTC	0					
EarI	!CTCTTC	0					
EarI	!GAAGAG	3	1623	2500	2710		
Ecl136II	GAG!CTC	1	37				
EclXI	C!GGCCG	2	796	2058			
Eco105I	TAC!GTA	0					
Eco31I	GGTCTCN!	0					
Eco31I	!NNNNNGAGACC	2	713	3141			
Eco47I	G!GWCC	3	682	2668	3113		
Eco47III	AGC!GCT	1	15				
Eco52I	C!GGCCG	2	796	2058			
Eco57I	!CTGAAG	3	580	2276	2708		
Eco57I	!CTTCAG	1	3542				
Eco81I	CC!TNAGG	3	351	1632	3264		
EcoNI	CCTNN!NNNAGG	0					
EcoO109I	RG!GNCCY	1	3250				
EcoO65I	G!GTNACC	0					
EcoRI	G!AATTC	1	48				
EcoRII	!CCWGG	12	267	315	411	1686	1741
			1758	2537	3116	3219	3909
			3922	4043			
EcoRV	GAT!ATC	0					
EcoT14I	C!CWGG	4	1881	1974	2584	2989	
EcoT22I	ATGCA!T	3	1724	1796	4127		
EcoT38I	GRGCY!C	5	39	76	1343	2517	3227
EheI	GGC!GCC	1	2153				
Esp3I	CGTCTCN!	0					
Esp3I	!NNNNNGAGACG	0					
EspI	GC!TNAGC	0					
FbaI	T!GATCA	1	108				
FinI	!GTCCC	4	1682	1754	1818	3113	
FinI	!GGGAC	3	2288	2820	2929		
Fnu4HI	GC!NGC	36	241	292	436	511	553
			734	796	799	929	1448
			1470	1484	1922	2061	2113
			2124	2214	2219	2256	2297
			2384	2387	2390	2626	2722
			2763	2777	2891	3230	3245
			3456	3662	3665	3730	3873
			4028				
FokI	GGATGNNNNNNNN!	4	2019	2476	2501	2955	
FokI	!NNNNNNNNNNNNNCATCC	5	163	251	308	463	1825
FspI	TGC!GCA	1	2254				
GdiII	!NNNNNYGGCCG	4	790	2052	2617	2644	
GdiII	CGGCCRN!	2	802	2064			
GsuI	!CTCCAG	1	2949				
GsuI	!CTGGAG	1	2970				
HaeI	WGG!CCW	8	521	564	752	1973	2234
			3596	4048	4059		
HaeII	RGCGC!Y	5	17	1419	1427	2155	3830
HaeIII	GG!CC	27	74	243	486	521	555

			564	578	710	752	798
			1118	1260	1915	1921	1930
			1973	2060	2234	2625	2652
			3161	3218	3251	3596	4030
			4048	4059			
HapII	C!CGG	20	20	76	86	666	1370
			2057	2134	2156	2184	2315
			2405	2472	2653	2928	2936
			3028	3502	3692	3718	3865
HgaI	GACGCNNNNN!	2	2862	2941			
HgaI	!NNNNNNNNNGCGTC	3	1485	3380	3958		
HgiAI	GWGCW!C	5	39	176	2265	2455	3760
HgiEII	!ACCNNNNNNGGT	1	3482				
HhaI	GCG!C	21	16	1418	1426	1452	1474
			1483	1496	1527	2146	2154
			2218	2255	2521	2781	2957
			3043	3446	3555	3729	3829
			3896				
Hin1I	GR!CGYC	3	2152	2854	2933		
HinP1I	G!CGC	21	14	1416	1424	1450	1472
			1481	1494	1525	2144	2152
			2216	2253	2519	2779	2955
			3041	3444	3553	3727	3827
			3894				
HincII	GTY!RAC	2	60	915			
HindIII	A!AGCTT	1	41				
HinfI	G!ANTC	14	23	372	699	803	1195
			1217	1627	2637	2771	2823
			2881	2918	3700	4096	
HpaI	GTT!AAC	1	915				
HpaII	C!CGG	20	20	76	86	666	1370
			2057	2134	2156	2184	2315
			2405	2472	2653	2928	2936
			3028	3502	3692	3718	3865
HphI	GGTGANNNNNNNN!	3	478	3223	3339		
HphI	!NNNNNNNTCACC	3	367	1269	2330		
KasI	G!GCGCC	1	2151				
KpnI	GGTAC!C	1	68				
Ksp632I	CTCTTCN!	0					
Ksp632I	!NNNNGAAGAG	3	1619	2496	2706		
KspI	CCGC!GG	1	71				
MaeI	C!TAG	9	11	771	807	1001	1419
			1975	2990	3324	3577	
MaeII	A!CGT	10	450	726	1212	1224	1267
			1377	2268	2455	3236	3369
MaeIII	!GTNAC	9	940	1441	1453	2272	2578
			3268	3534	3650	3713	
MamI	GATNN!NNATC	2	814	2011			
MboI	!GATC	23	28	79	108	222	456
			632	809	1989	1993	2012
			2323	2401	2482	2491	2569
			2945	2961	3320	3332	3410
			3418	3429	3504		
MboII	GAAGANNNNNNNN!	8	232	398	511	1408	1636
			2513	2723	3342		
MboII	!NNNNNNNTCTTC	4	2803	2970	3170	3413	
McrI	!CGRYCG	4	86	795	2057	3732	
MfeI	!CAATTG	1	901				
MflI	R!GATCY	10	28	79	632	2323	2569

			2961	3320	3332	3418	3429
MluI	A!CGCGT	0					
MmeI	!TCCRAC	2	478	1219			
MmeI	!GTYGGA	2	3695	3879			
MnlI	CCTCNNNNNNN!	12	255	665	776	871	880
			1935	1941	2753	2959	3273
			3643	3967			
MnlI	!NNNNNNNGAGG	22	135	174	195	228	345
			510	553	699	830	1295
			1626	1904	1910	1947	1950
			1962	2002	2066	2202	2559
			2989	3892			
MroI	T!CCGGA	0					
MscI	TGG!CCA	2	752	2234			
MseI	T!TAA	15	336	853	914	1035	1056
			1067	1079	1090	1107	1205
			1476	3295	3309	3314	3366
MspI	C!CGG	20	20	76	86	666	1370
			2057	2134	2156	2184	2315
			2405	2472	2653	2928	2936
			3028	3502	3692	3718	3865
MstI	TGC!GCA	1	2254				
MstII	CC!TNAGG	3	351	1632	3264		
MunI	C!AATTG	1	902				
MvaI	CC!WGG	12	269	317	413	1688	1743
			1760	2539	3118	3221	3911
			3924	4045			
MvnI	CG!CG	16	70	510	801	1076	1452
			1472	1496	1527	2218	2519
			2957	3041	3104	3173	3446
			4027				
NaeI	GCC!GGC	3	1371	2654	2937		
NarI	GG!CGCC	1	2152				
NciI	CC!SGG	7	76	77	666	2156	2316
			2929	3693			
NcoI	C!CATGG	2	1881	2584			
NdeI	CA!TATG	0					
NdeII	!GATC	23	28	79	108	222	456
			632	809	1989	1993	2012
			2323	2401	2482	2491	2569
			2945	2961	3320	3332	3410
			3418	3429	3504		
NgoMI	G!CCGGC	3	1369	2652	2935		
NheI	G!CTAGC	0					
NlaIII	CATG!	20	100	124	130	142	220
			286	366	1582	1722	1794
			1885	2026	2371	2557	2588
			2614	2970	3354	4074	4125
NlaIV	GGN!NCC	18	66	74	81	148	208
			1307	1328	1340	1531	1692
			1764	2153	2188	3036	3115
			3160	4003	4042		
NotI	GC!GGCCGC	1	796				
NruI	TCG!CGA	0					
NsiI	ATGCA!T	3	1724	1796	4127		
Nsp(7524)I	RCATG!Y	5	124	1722	1794	2557	4074
Nsp(7524)V	TT!CGAA	2	46	2834			
NspBII	CMG!CKG	6	70	545	1650	2258	3487
			3732				

NspII	GDGCH!C	14	39 786 2455	76 1343 2517	149 2098 3227	176 2191 3760	209 2265
NspIII	C!YCGRG	2	32	75			
NspIV	G!GNCC	12	72 682 3217	73 1259 3250	242 2668	485 3113	577 3159
NunII	GG!CGCC	1	2152				
PacI	TTAAT!TAA	0					
Paer71	C!TCGAG	1	32				
PalI	GG!CC	27	74 564 1118 1973 3161 4048	243 578 1260 2060 3218 4059	486 710 1915 2234 3251	521 752 1921 2625 3596	555 798 1930 2652 4030
PflMI	CCANNNN!NTGG	2	679	691			
PleI	GAGTCNNNN!	2	1203	1635			
PleI	!NNNNNGACTC	5	17	797	1211	2817	3694
PmaCI	CAC!GTG	0					
PmeI	GTTT!AAAC	0					
PmlI	CAC!GTG	0					
PpuMI	RG!GWCCY	0					
PshAI	GACNN!NNGTC	1	725				
PstI	CTGCA!G	1	57				
PvuI	CGAT!CG	0					
PvuII	CAG!CTG	2	1650	2258			
RmaI	C!TAG	9	11 1975	771 2990	807 3324	1001 3577	1419
RsaI	GT!AC	6	66 2458	137	287	539	758
RsrI	G!AATTC	1	48				
RsrII	CG!GWCCG	1	2668				
SacI	GAGCT!C	1	39				
SacII	CCGC!GG	1	71				
SalI	G!TCGAC	1	58				
Sau3AI	!GATC	23	28 632 2323 2945 3418	79 809 2401 2961 3429	108 1989 2482 3320 3504	222 1993 2491 3332	456 2012 2569 3410
Sau96I	G!GNCC	12	72 682 3217	73 1259 3250	242 2668	485 3113	577 3159
SauI	CC!TNAGG	3	351	1632	3264		
ScaI	AGT!ACT	1	758				
ScrFI	CC!NGG	19	76 666 2316 3693	77 1688 2539 3911	269 1743 2929 3924	317 1760 3118 4045	413 2156 3221
SduI	GDGCH!C	14	39 786 2455	76 1343 2517	149 2098 3227	176 2191 3760	209 2265
SecI	C!CNNGG	20	68 411 1925 3116	75 1686 1974 3117	180 1758 2315 3219	315 1881 2584 3220	316 1916 2989 3910
SexI	!CTCGAG	1	31				
SfaNI	GCATCNNNNN!	8	330	447	968	1731	1803

			2451	2515	2790		
SfaNI	!NNNNNNNNNGATGC	8	483	522	651	782	2110
			2365	2581	3973		
SfcI	C!TRYAG	4	53	1487	3614	3805	
SfiI	GGCCNNNN!NGGCC	2	561	1927			
SfuI	TT!CGAA	2	46	2834			
SgrAI	CR!CCGGYG	0					
SinI	G!GWCC	3	682	2668	3113		
SmaI	CCC!GGG	1	77				
SnaBI	TAC!GTA	0					
SnaI	!GTATAC	0					
SnoI	G!TGCAC	2	172	3756			
SpeI	A!CTAGT	0					
SphI	GCATG!C	3	1722	1794	2557		
SplI	C!GTACG	0					
SrfI	GCCC!GGGC	0					
Sse8387I	CCTGCA!GG	0					
SspI	AAT!ATT	2	1060	1613			
SstI	GAGCT!C	1	39				
SstII	CCGC!GG	1	71				
SstIII	!ACGT	10	449	725	1211	1223	1266
			1376	2267	2454	3235	3368
StuI	AGG!CCT	1	1973				
StyI	C!CWWGG	4	1881	1974	2584	2989	
StySJI	!GAGNNNNNNNGTRC	0					
StySJI	!GYACNNNNNNNCTC	1	756				
SwaI	ATTT!AAAT	0					
TaqI	T!CGA	17	33	46	59	234	261
			729	1301	1992	2265	2421
			2445	2481	2643	2834	2879
			3134	3972			
TaqII	GACCGANNNNNNNNNN!	3	1172	2189	2857		
TaqII	!NNNNNNNNNTCGGTC	1	3101				
TaqII	CACCCANNNNNNNNNN!	2	224	329			
TaqII	!NNNNNNNNNTGGGTG	2	2056	2648			
TfiI	G!AWTC	7	372	699	2637	2771	2881
			2918	4096			
ThaI	CG!CG	16	70	510	801	1076	1452
			1472	1496	1527	2218	2519
			2957	3041	3104	3173	3446
			4027				
Tsp45I	!GTSAC	3	1441	2272	2578		
TspEI	!AATT	10	48	902	966	1044	1070
			1081	1728	1800	1892	3310
Tth111I	GACN!NNGTC	1	2270				
Tth111II	CAARCANNNNNNNNNN!	1	3479				
Tth111II	!NNNNNNNNNTGYTTG	3	2587	3447	3486		
TthHB8I	T!CGA	17	33	46	59	234	261
			729	1301	1992	2265	2421
			2445	2481	2643	2834	2879
			3134	3972			
Van91I	CCANNNN!NTGG	2	679	691			
VspI	AT!TAAT	0					
XbaI	T!CTAGA	1	806				
XcmI	!CCANNNNNNNNTCG	1	2427				
XcyI	C!CCGGG	1	75				
XhoI	C!TCGAG	1	32				
XhoII	R!GATCY	10	28	79	632	2323	2569
			2961	3320	3332	3418	3429

XmaI	C!CCGGG	1	75
XmaIII	C!GGCCG	2	796 2058
XmnI	GAANN!NNTTC	0	
XorII	CGAT!CG	0	