

Table 4. Characteristics of paired repeat sequences in *Helicobacter pylori* strain 26695

Chromosome	Chromosome	Length of	Distance	Sequences
location of	location of	repeat	between	flanked by paired repeats
repeat 1	repeat 2	sequence, bp	sequences, bp	in recombination hotspots*
1	8	174	7	Noncoding region upstream of HP0001
1	15	167	14	Noncoding region upstream of HP0001
1	22	160	21	Noncoding region upstream of HP0001
1	29	153	28	Noncoding region upstream of HP0001
1	36	146	35	Noncoding region upstream of HP0001
1	43	139	42	Noncoding region upstream of HP0001
1	50	132	49	Noncoding region upstream of HP0001
1	57	125	56	Noncoding region upstream of HP0001
1	64	118	63	Noncoding region upstream of HP0001
1	71	111	70	Noncoding region upstream of HP0001
1	78	104	77	Noncoding region upstream of HP0001
1	85	97	84	Noncoding region upstream of HP0001
1	92	90	91	Noncoding region upstream of HP0001
1	99	83	98	Noncoding region upstream of HP0001
1	106	76	105	Noncoding region upstream of HP0001
1	113	69	112	Noncoding region upstream of HP0001
1	120	62	119	Noncoding region upstream of HP0001
1	127	55	126	Noncoding region upstream of HP0001
1	134	48	133	Noncoding region upstream of HP0001
1	141	41	140	Noncoding region upstream of HP0001
1	148	34	147	Noncoding region upstream of HP0001
1	155	27	154	Noncoding region upstream of HP0001
175	1665518	24	2524	Noncoding region upstream of HP0001
3371	673020	24	669649	
5207	331826	27	326619	
5207	947552	27	725522	
5207	1317804	24	355270	
5251	947590	32	725528	
5298	23381	24	18083	

Chromosome	Chromosome	Length of	Distance	Sequences
location of	location of	repeat	between	
repeat 1	repeat 2	sequence, bp	repeat	flanked by paired repeats
			sequences, bp	in recombination hotspots*
5425	332038	39	326613	
5425	947764	39	725528	
5425	1318022	39	355270	
5487	779254	27	773767	
5686	1244040	27	429513	
6133	332758	31	326625	
6942	25142	24	18200	
7131	949581	43	725417	
7210	780926	24	773716	
7220	949665	42	725422	
7332	949782	34	725417	
22912	1503141	24	187638	
23045	1503273	24	187639	
23343	1243602	25	447608	
23348	947604	26	743611	
23799	239150	26	215351	
24687	948925	27	743629	
24903	949153	28	743617	
25377	780893	27	755516	
44280	1358632	26	353515	
44360	1358710	24	353517	
44955	932167	24	780655	
62289	62520	99	231	Noncoding region upstream of HP0058
62328	63412	28	1084	HP0058 and 5' region of HP0059
62363	63447	81	1084	HP0058 and 5' region of HP0059
62453	63537	30	1084	HP0058 and 5' region of HP0059
62511	63364	25	853	HP0058 and 5' region of HP0059
62559	63412	28	853	HP0058 and 5' region of HP0059
62594	63447	25	853	HP0058 and 5' region of HP0059
68029	68131	36	102	
86222	86537	31	315	
86915	634568	26	547653	

Chromosome	Chromosome	Length of	Distance	Sequences
location of	location of	repeat	between	flanked by paired repeats
repeat 1	repeat 2	sequence, bp	sequences, bp	in recombination hotspots*
86921	109416	59	22495	
119865	903616	24	783751	
119934	973650	28	814151	
127931	129383	121	1452	Hypothetical protein HP0118 and 3' region of HP0119
127931	131053	121	3122	Hypothetical proteins HP0118, HP0119, and 3' region of HP0119
127931	1256746	61	539052	
127931	1258168	121	537630	
127997	1256812	55	539052	
128053	1258290	31	537630	
128076	129540	116	1464	5' region of HP0118 and 3' region of HP0119
128076	131210	116	3134	5' region of HP0118, HP0119 and 3' region of HP0120
128076	1256903	43	539040	
128083	1258321	79	537629	
128120	1256947	27	539040	
128163	1256990	29	539040	
128196	1257023	32	539040	
128204	129668	68	1464	5' region of HP0118 and 3' region of HP0119
128204	131338	68	3134	5' region of HP0118, HP0119 and 3' region of HP0120
128204	1258442	24	537629	
128242	1257069	255	539040	
128249	1258487	52	537629	
128273	129737	27	1464	5' region of HP0118 and 3' region of HP0119
128273	131407	27	3134	5' region of HP0118, HP0119 and 3' region of HP0120
128304	129768	93	1464	5' region of HP0118 and 3' region of HP0119
128304	131438	93	3134	5' region of HP0118, HP0119 and 3' region of HP0120
128319	1258557	78	537629	

Chromosome	Chromosome	Length of	Distance	Sequences
location of	location of	repeat	between	
repeat 1	repeat 2	sequence, bp	sequences, bp	flanked by paired repeats
				in recombination hotspots*
128426	129890	40	1464	5' region of HP0118 and 3' region of HP0119
128426	131560	40	3134	5' region of HP0118, HP0119 and 3' region of HP0120
128441	1258679	25	537629	
128492	128513	82	21	Internal to HP0118
128492	128534	61	42	Internal to HP0118
128492	128555	40	63	Internal to HP0118
128610	129990	29	1380	5' region of HP0118 and 3' region of HP0119
128610	1257395	414	539082	
128615	128669	24	54	Internal to HP0118
128615	1257454	24	539028	
128640	130020	32	1380	5' region of HP0118 and 3' region of HP0119
128640	130158	39	1518	5' region of HP0118 and 3' region of HP0119
128640	130296	39	1656	5' region of HP0118 and 3' region of HP0119
128669	129995	42	1326	5' region of HP0118 and 3' region of HP0119
128669	1257400	24	539136	
128672	130136	39	1464	5' region of HP0118 and 3' region of HP0119
128672	130274	39	1602	5' region of HP0118 and 3' region of HP0119
128762	131893	26	3131	5' region of HP0118, HP0119 and 3' region of HP0120
128763	1258851	95	537779	
128789	131920	175	3131	5' region of HP0118, HP0119 and HP0120
129025	1257810	133	539082	
129041	132172	89	3131	5' region of HP0118, HP0119 and HP0120
129087	1259174	55	537780	
129151	130821	780	1670	HP0119 and 5' region of HP0120
129151	1259238	86	537780	
129159	1257944	349	539082	
129238	1259325	53	537780	
129372	1256735	72	540504	
129449	1256812	59	540504	
129539	1256902	44	540504	

Chromosome	Chromosome	Length of	Distance	Sequences
location of	location of	repeat	between	
repeat 1	repeat 2	sequence, bp	repeat	flanked by paired repeats
			sequences, bp	in recombination hotspots*
129547	1258321	79	539093	
129584	1256947	27	540504	
129627	1256990	30	540504	
129663	1258437	29	539093	
129668	1257031	24	540504	
129706	1257069	30	540504	
129737	1257100	27	540504	
129737	1258511	27	539093	
129768	1257131	93	540504	
129783	1258557	107	539093	
129890	1257253	40	540504	
129905	1258679	27	539093	
129961	130174	28	213	Internal to HP0119
129961	130312	28	351	Internal to HP0119
129962	130058	27	96	Internal to HP0119
129962	130079	27	117	Internal to HP0119
129962	130100	27	138	Internal to HP0119
129962	130196	27	234	Internal to HP0119
129962	130217	27	255	Internal to HP0119
129962	130238	27	276	Internal to HP0119
129962	130334	27	372	Internal to HP0119
129962	130355	27	393	Internal to HP0119
129963	1257326	30	540504	
129987	1257392	32	540462	
129995	1257454	42	540408	
129998	130136	54	138	Internal to HP0119
129998	130274	54	276	Internal to HP0119
130020	1257425	32	540462	
130053	130074	58	21	Internal to HP0119
130053	130095	37	42	Internal to HP0119
130053	130191	196	138	Internal to HP0119
130053	130212	58	159	Internal to HP0119

Chromosome	Chromosome	Length of	Distance	Sequences
location of	location of	repeat	between	flanked by paired repeats
repeat 1	repeat 2	sequence, bp	sequences, bp	in recombination hotspots*
130053	130233	37	180	Internal to HP0119
130053	130329	58	276	Internal to HP0119
130053	130350	37	297	Internal to HP0119
130058	130175	74	117	Internal to HP0119
130058	130313	77	255	Internal to HP0119
130059	1257326	26	540600	
130062	131699	27	1637	5' region of HP0119 and 3' region of HP0120
130079	130175	53	96	Internal to HP0119
130079	130313	53	234	Internal to HP0119
130080	1257326	26	540621	
130083	131699	27	1616	5' region of HP0119 and 3' region of HP0120
130100	130175	32	75	Internal to HP0119
130100	130313	32	213	Internal to HP0119
130101	1257326	26	540642	
130104	131699	27	1595	5' region of HP0119 and 3' region of HP0120
130136	1257457	39	540546	
130158	1257425	39	540600	
130175	130196	74	21	Internal to HP0119
130175	130217	53	42	Internal to HP0119
130175	130238	32	63	Internal to HP0119
130175	130334	53	159	Internal to HP0119
130175	130355	32	180	Internal to HP0119
130176	1257326	26	540717	
130179	131699	27	1520	5' region of HP0119 and 3' region of HP0120
130196	130313	77	117	Internal to HP0119
130197	1257326	26	540738	
130200	131699	27	1499	5' region of HP0119 and 3' region of HP0120
130217	130313	53	96	Internal to HP0119
130218	1257326	26	540759	
130221	131699	27	1478	5' region of HP0119 and 3' region of HP0120
130238	130313	32	75	Internal to HP0119
130239	1257326	26	540780	

Chromosome	Chromosome	Length of	Distance	Sequences
location of	location of	repeat	between	flanked by paired repeats
repeat 1	repeat 2	sequence, bp	sequences, bp	in recombination hotspots*
130242	131699	27	1457	5' region of HP0119 and 3' region of HP0120
130274	1257457	39	540684	
130296	1257425	39	540738	
130313	130334	53	21	Internal to HP0119
130313	130355	32	42	Internal to HP0119
130314	1257326	26	540855	
130317	131699	27	1382	5' region of HP0119 and 3' region of HP0120
130335	1257326	26	540876	
130338	131699	27	1361	5' region of HP0119 and 3' region of HP0120
130356	1257326	26	540897	
130359	131699	27	1340	5' region of HP0119 and 3' region of HP0120
130419	131822	31	1403	5' region of HP0119 and 3' region of HP0120
130419	1258779	31	539507	
130797	1259214	110	539450	
130829	1257944	349	540752	
130908	1259325	53	539450	
131042	1256735	72	542174	
131119	1256812	59	542174	
131209	1256902	44	542174	
131217	1258321	79	540763	
131254	1256947	27	542174	
131297	1256990	30	542174	
131333	1258437	29	540763	
131338	1257031	24	542174	
131376	1257069	30	542174	
131407	1257100	27	542174	
131407	1258511	27	540763	
131438	1257131	93	542174	
131453	1258557	107	540763	
131560	1257253	40	542174	
131575	1258679	26	540763	
131801	1258758	64	540910	

Chromosome	Chromosome	Length of	Distance	Sequences
location of	location of	repeat	between	flanked by paired repeats
repeat 1	repeat 2	sequence, bp	sequences, bp	in recombination hotspots*
131893	1257547	26	542213	
131894	1258851	25	540910	
131920	1257574	175	542213	
131920	1258877	69	540910	
132107	1259064	44	540910	
132156	1259113	33	540910	
132172	1257826	89	542213	
132218	1259174	43	540911	
141586	968574	26	826988	
150633	152342	24	1709	3' region of HP0140 and 5' region of HP0141
150674	152383	57	1709	3' region of HP0140 and 5' region of HP0141
150831	152540	29	1709	3' region of HP0140 and 5' region of HP0141
151833	153548	31	1715	3' region of HP0140 and 5' region of HP0141
169078	169186	28	108	
169970	968560	28	798590	
169974	454240	25	284266	
169974	1050962	25	786879	
170543	1524501	27	313909	
170578	466527	56	295949	
170597	1524560	37	313904	
177351	177363	33	12	
186335	1536637	26	317565	
218426	1158879	24	727414	
235298	1243908	29	659257	
235355	1243965	29	659257	
235421	1244031	32	659257	
240152	780960	33	540808	
267029	1044563	45	777534	
267075	1044609	166	777534	
267281	1044821	30	777540	
268763	1044855	54	776092	
268818	1044910	41	776092	

Chromosome	Chromosome	Length of	Distance	Sequences
location of	location of	repeat	between	flanked by paired repeats
repeat 1	repeat 2	sequence, bp	sequences, bp	in recombination hotspots*
268895	1044987	33	776092	
268947	1045039	28	776092	
330497	945692	25	615195	
330498	946347	24	615849	
330960	946684	243	615724	
331204	946928	311	615724	
331314	331510	28	196	
331479	1317454	31	681892	
331510	947038	28	615528	
331523	947248	100	615725	
331523	1317500	145	681890	
331624	947349	29	615725	
331668	1317646	182	681889	
331671	947398	81	615727	
331745	947471	127	615726	
331854	1317838	522	681883	
331878	779032	26	447154	
331891	947617	29	615726	
331924	947650	40	615726	
331984	947710	125	615726	
332122	947848	29	615726	
332167	947893	59	615726	
332227	947953	29	615726	
332305	948031	71	615726	
332377	948103	342	615726	
332377	1318361	342	681883	
332944	948631	133	615687	
333745	1319693	28	681919	
333790	1319738	34	681919	
333825	1319773	403	681919	
333859	949477	47	615618	
334006	949624	30	615618	

Chromosome	Chromosome	Length of	Distance	Sequences
location of	location of	repeat	between	
repeat 1	repeat 2	sequence, bp	repeat	flanked by paired repeats
			sequences, bp	in recombination hotspots*
334211	949800	58	615589	
338156	338552	29	396	Internal to HP0322
338674	338698	74	24	Internal to HP0322
338674	338722	50	48	Internal to HP0322
338674	338746	26	72	Internal to HP0322
381023	1521950	46	526940	
382073	1523120	24	526820	
382110	1523157	36	526820	
382575	765466	27	382891	
382722	1523781	24	526808	
382808	1523873	44	526802	
382903	1523968	51	526802	
383029	1524094	35	526802	
389932	389953	24	21	
425453	1068545	523	643092	
425470	593779	31	168309	
425509	593818	61	168309	
425977	1069069	29	643092	
426006	1069097	34	643091	
426038	1069130	199	643092	
426238	1069330	151	643092	
426389	1069480	111	643091	
426501	1069592	929	643091	
444403	444411	80	8	Internal to HP0427
444403	444419	72	16	Internal to HP0427
444403	444427	64	24	Internal to HP0427
444403	444435	56	32	Internal to HP0427
444403	444443	48	40	Internal to HP0427
444403	444451	40	48	Internal to HP0427
444403	444459	32	56	Internal to HP0427
444403	444467	24	64	Internal to HP0427
444531	444539	27	8	Internal to HP0427

Chromosome	Chromosome	Length of	Distance	Sequences
location of	location of	repeat	between	
repeat 1	repeat 2	sequence, bp	repeat	flanked by paired repeats
			sequences, bp	in recombination hotspots*
444764	444780	78	16	Noncoding region downstream of HP0427
444764	444796	62	32	Noncoding region downstream of HP0427
444764	444812	46	48	Noncoding region downstream of HP0427
444764	444828	30	64	Noncoding region downstream of HP0427
448468	1045074	372	596606	
448841	1045447	82	596606	
448924	1045530	122	596606	
448924	1508330	24	608461	
452617	453350	24	733	
454237	1050959	1620	596722	
454240	968564	24	514324	
455858	1052580	270	596722	
466486	1524505	35	609848	
466546	1524560	38	609853	
499022	987082	1108	488060	
555845	556169	100	324	Internal to HP0527 (<i>cagY</i>)
555861	556623	56	762	Internal to HP0527 (<i>cagY</i>)
555872	556748	29	876	Internal to HP0527 (<i>cagY</i>)
555872	556862	45	990	Internal to HP0527 (<i>cagY</i>)
555872	557300	29	1428	Internal to HP0527 (<i>cagY</i>)
555872	557414	29	1542	Internal to HP0527 (<i>cagY</i>)
555872	557852	29	1980	Internal to HP0527 (<i>cagY</i>)
555878	556433	71	555	Internal to HP0527 (<i>cagY</i>)
555878	557627	50	1749	Internal to HP0527 (<i>cagY</i>)
555946	556270	126	324	Internal to HP0527 (<i>cagY</i>)
556185	556623	56	438	Internal to HP0527 (<i>cagY</i>)
556196	556748	29	552	Internal to HP0527 (<i>cagY</i>)
556196	556862	45	666	Internal to HP0527 (<i>cagY</i>)
556196	557300	29	1104	Internal to HP0527 (<i>cagY</i>)
556196	557414	29	1218	Internal to HP0527 (<i>cagY</i>)
556196	557852	29	1656	Internal to HP0527 (<i>cagY</i>)
556202	556433	67	231	Internal to HP0527 (<i>cagY</i>)

Chromosome	Chromosome	Length of	Distance	Sequences
location of	location of	repeat	between	
repeat 1	repeat 2	sequence, bp	repeat	flanked by paired repeats
			sequences, bp	in recombination hotspots*
556202	557627	50	1425	Internal to HP0527 (<i>cagY</i>)
556397	556832	35	435	Internal to HP0527 (<i>cagY</i>)
556398	557823	34	1425	Internal to HP0527 (<i>cagY</i>)
556403	557597	80	1194	Internal to HP0527 (<i>cagY</i>)
556411	557719	45	1308	Internal to HP0527 (<i>cagY</i>)
556425	557181	31	756	Internal to HP0527 (<i>cagY</i>)
556433	556640	39	207	Internal to HP0527 (<i>cagY</i>)
556433	556868	39	435	Internal to HP0527 (<i>cagY</i>)
556484	557792	26	1308	Internal to HP0527 (<i>cagY</i>)
556505	557492	44	987	Internal to HP0527 (<i>cagY</i>)
556511	556946	90	435	Internal to HP0527 (<i>cagY</i>)
556571	557558	29	987	Internal to HP0527 (<i>cagY</i>)
556571	557996	29	1425	Internal to HP0527 (<i>cagY</i>)
556571	558203	30	1632	Internal to HP0527 (<i>cagY</i>)
556571	558425	30	1854	Internal to HP0527 (<i>cagY</i>)
556602	557037	37	435	Internal to HP0527 (<i>cagY</i>)
556602	557589	31	987	Internal to HP0527 (<i>cagY</i>)
556634	556748	29	114	Internal to HP0527 (<i>cagY</i>)
556634	556862	71	228	Internal to HP0527 (<i>cagY</i>)
556634	557300	29	666	Internal to HP0527 (<i>cagY</i>)
556634	557414	29	780	Internal to HP0527 (<i>cagY</i>)
556634	557852	29	1218	Internal to HP0527 (<i>cagY</i>)
556640	557627	39	987	Internal to HP0527 (<i>cagY</i>)
556730	557282	80	552	Internal to HP0527 (<i>cagY</i>)
556730	557396	86	666	Internal to HP0527 (<i>cagY</i>)
556737	556851	40	114	Internal to HP0527 (<i>cagY</i>)
556737	557841	46	1104	Internal to HP0527 (<i>cagY</i>)
556754	557189	29	435	Internal to HP0527 (<i>cagY</i>)
556754	557741	29	987	Internal to HP0527 (<i>cagY</i>)
556784	557105	26	321	Internal to HP0527 (<i>cagY</i>)
556784	557771	26	987	Internal to HP0527 (<i>cagY</i>)
556785	557220	31	435	Internal to HP0527 (<i>cagY</i>)

Chromosome	Chromosome	Length of	Distance	Sequences
location of	location of	repeat	between	
repeat 1	repeat 2	sequence, bp	repeat	flanked by paired repeats
			sequences, bp	in recombination hotspots*
556811	557132	32	321	Internal to HP0527 (<i>cagY</i>)
556811	557363	39	552	Internal to HP0527 (<i>cagY</i>)
556817	557690	26	873	Internal to HP0527 (<i>cagY</i>)
556833	557823	58	990	Internal to HP0527 (<i>cagY</i>)
556838	557597	29	759	Internal to HP0527 (<i>cagY</i>)
556851	557289	40	438	Internal to HP0527 (<i>cagY</i>)
556851	557403	40	552	Internal to HP0527 (<i>cagY</i>)
556868	557627	39	759	Internal to HP0527 (<i>cagY</i>)
556910	557900	40	990	Internal to HP0527 (<i>cagY</i>)
556946	557498	38	552	Internal to HP0527 (<i>cagY</i>)
557006	557558	29	552	Internal to HP0527 (<i>cagY</i>)
557006	557996	29	990	Internal to HP0527 (<i>cagY</i>)
557006	558203	35	1197	Internal to HP0527 (<i>cagY</i>)
557006	558425	32	1419	Internal to HP0527 (<i>cagY</i>)
557036	557588	32	552	Internal to HP0527 (<i>cagY</i>)
557081	557195	24	114	Internal to HP0527 (<i>cagY</i>)
557081	557747	65	666	Internal to HP0527 (<i>cagY</i>)
557081	557864	44	783	Internal to HP0527 (<i>cagY</i>)
557105	557336	59	231	Internal to HP0527 (<i>cagY</i>)
557105	557450	26	345	Internal to HP0527 (<i>cagY</i>)
557106	557220	25	114	Internal to HP0527 (<i>cagY</i>)
557138	557690	37	552	Internal to HP0527 (<i>cagY</i>)
557181	557619	31	438	Internal to HP0527 (<i>cagY</i>)
557181	557733	38	552	Internal to HP0527 (<i>cagY</i>)
557189	557306	29	117	Internal to HP0527 (<i>cagY</i>)
557189	557420	29	231	Internal to HP0527 (<i>cagY</i>)
557189	557858	30	669	Internal to HP0527 (<i>cagY</i>)
557220	557337	25	117	Internal to HP0527 (<i>cagY</i>)
557220	557451	40	231	Internal to HP0527 (<i>cagY</i>)
557220	557772	25	552	Internal to HP0527 (<i>cagY</i>)
557231	557669	29	438	Internal to HP0527 (<i>cagY</i>)
557252	557804	36	552	Internal to HP0527 (<i>cagY</i>)

Chromosome	Chromosome	Length of	Distance	Sequences
location of	location of	repeat	between	
repeat 1	repeat 2	sequence, bp	repeat	flanked by paired repeats
			sequences, bp	in recombination hotspots*
557271	557385	91	114	Internal to HP0527 (<i>cagY</i>)
557289	557841	46	552	Internal to HP0527 (<i>cagY</i>)
557306	557741	29	435	Internal to HP0527 (<i>cagY</i>)
557336	557771	41	435	Internal to HP0527 (<i>cagY</i>)
557369	557690	26	321	Internal to HP0527 (<i>cagY</i>)
557403	557841	46	438	Internal to HP0527 (<i>cagY</i>)
557420	557741	29	321	Internal to HP0527 (<i>cagY</i>)
557450	557771	26	321	Internal to HP0527 (<i>cagY</i>)
557462	557669	31	207	Internal to HP0527 (<i>cagY</i>)
557516	557954	40	438	Internal to HP0527 (<i>cagY</i>)
557557	557995	30	438	Internal to HP0527 (<i>cagY</i>)
557557	558202	30	645	Internal to HP0527 (<i>cagY</i>)
557557	558424	30	867	Internal to HP0527 (<i>cagY</i>)
557597	557828	29	231	Internal to HP0527 (<i>cagY</i>)
557605	557719	45	114	Internal to HP0527 (<i>cagY</i>)
557741	557858	50	117	Internal to HP0527 (<i>cagY</i>)
557984	558191	41	207	Internal to HP0527 (<i>cagY</i>)
557984	558413	41	429	Internal to HP0527 (<i>cagY</i>)
558184	558406	51	222	Internal to HP0527 (<i>cagY</i>)
559014	559404	417	390	Internal to HP0527 (<i>cagY</i>)
559014	559794	27	780	Internal to HP0527 (<i>cagY</i>)
559042	559822	119	780	Internal to HP0527 (<i>cagY</i>)
559432	559822	119	390	Internal to HP0527 (<i>cagY</i>)
582040	582175	39	135	
582286	582943	27	657	
582762	582864	49	102	
593779	1068562	31	474783	
593818	1068601	61	474783	
594088	1020503	32	426415	
594173	1020585	59	426412	
647998	650512	41	2514	
655961	986164	29	330203	

Chromosome	Chromosome	Length of	Distance	Sequences
location of	location of	repeat	between	
repeat 1	repeat 2	sequence, bp	repeat	flanked by paired repeats
			sequences, bp	in recombination hotspots*
696789	696810	192	21	Internal to HP0651 (fucosyltransferase)
696789	696831	171	42	Internal to HP0651 (fucosyltransferase)
696789	696852	150	63	Internal to HP0651 (fucosyltransferase)
696789	696873	129	84	Internal to HP0651 (fucosyltransferase)
696789	696894	108	105	Internal to HP0651 (fucosyltransferase)
696789	696915	87	126	Internal to HP0651 (fucosyltransferase)
696789	696936	66	147	Internal to HP0651 (fucosyltransferase)
696789	696957	45	168	Internal to HP0651 (fucosyltransferase)
696789	696978	24	189	Internal to HP0651 (fucosyltransferase)
756758	1155929	26	399171	
765065	1523173	25	758108	
765353	1523515	29	758162	
765458	996158	25	230700	
765481	996180	39	230699	
765536	996235	41	230699	
765580	996279	49	230699	
765632	996331	32	230699	
779018	1243593	26	464575	
779032	1317862	26	538830	
803822	1484895	25	681073	
824786	824801	26	15	
845288	899721	38	54433	
845343	899775	56	54432	
845451	903639	25	58188	
845591	899873	32	54282	
845625	899907	43	54282	
845672	899954	45	54282	
845682	846312	49	630	Internal to HP0790 (<i>prrB</i>)
845682	900582	50	54900	
846084	901058	47	54974	
846093	900387	28	54294	
846097	846781	38	684	Internal to HP0790 (<i>prrB</i>)

Chromosome	Chromosome	Length of	Distance	Sequences
location of	location of	repeat	between	
repeat 1	repeat 2	sequence, bp	repeat	flanked by paired repeats
			sequences, bp	in recombination hotspots*
846126	900420	36	54294	
846198	900480	38	54282	
846237	900519	57	54282	
846258	846270	36	12	Internal to HP0790 (<i>prrB</i>)
846258	846282	24	24	Internal to HP0790 (<i>prrB</i>)
846258	900552	24	54294	
846270	900540	91	54270	
846282	900540	24	54258	
846312	899964	35	53652	
846781	900391	24	53610	
846781	901071	34	54290	
846820	901110	28	54290	
899964	900582	35	618	
900387	901067	28	680	
900540	900552	24	12	
903626	1186952	25	283326	
903659	973628	33	69969	
903715	973686	27	69971	
932710	1181085	41	248375	
945659	946313	28	654	
945693	946347	30	654	
947203	1317454	31	370251	
947225	1317477	123	370252	
947349	1317601	29	370252	
947398	1317649	81	370251	
947471	1317723	105	370252	
947617	1317875	29	370258	
947650	1317908	40	370258	
947710	1317968	125	370258	
947848	1318106	29	370258	
947893	1318151	59	370258	
947953	1318211	29	370258	

Chromosome	Chromosome	Length of	Distance	Sequences
location of	location of	repeat	between	flanked by paired repeats
repeat 1	repeat 2	sequence, bp	sequences, bp	in recombination hotspots*
947968	1243971	29	296003	
948031	1318289	414	370258	
949477	1319807	47	370330	
949624	1319954	30	370330	
950604	950739	28	135	
950648	950782	33	134	
964720	1071929	32	107209	
966355	967972	25	1617	
968525	968637	24	112	
968564	1050962	24	82398	
973595	1612766	30	639171	
980269	980326	24	57	
980891	981290	203	399	
1020796	1022794	31	1998	
1045526	1508326	28	462800	
1060174	1060227	56	53	
1060307	1612984	271	552677	
1060309	1156709	1890	96400	
1060579	1613256	1621	552677	
1062171	1524705	25	462534	
1089009	1443499	24	354490	
1156709	1612986	269	456277	
1156979	1613256	1620	456277	
1158571	1524705	25	366134	
1166553	1166613	29	60	
1182076	1182184	26	108	
1207293	1510847	552	303554	
1207863	1511416	78	303553	
1207944	1511496	267	303552	
1208211	1511764	61	303553	
1208274	1511828	119	303554	
1208394	1511948	33	303554	

Chromosome	Chromosome	Length of	Distance	Sequences
location of	location of	repeat	between	flanked by paired repeats
repeat 1	repeat 2	sequence, bp	sequences, bp	in recombination hotspots*
1208428	1511982	470	303554	
1208897	1512450	713	303553	
1256735	1258157	72	1422	HP1187
1256812	1258234	74	1422	HP1187 and 3' region of HP1188
1256910	1258321	36	1411	5' region of HP1187 and 3' region of HP1188
1256947	1258358	27	1411	5' region of HP1187 and 3' region of HP1188
1256975	1258386	34	1411	5' region of HP1187 and 3' region of HP1188
1257031	1258442	44	1411	5' region of HP1187 and 3' region of HP1188
1257076	1258487	52	1411	5' region of HP1187 and 3' region of HP1188
1257146	1258557	78	1411	5' region of HP1187 and 3' region of HP1188
1257268	1258679	25	1411	5' region of HP1187 and 3' region of HP1188
1257350	1257371	27	21	Internal region of HP1187
1257400	1257454	24	54	Internal region of HP1187
1257548	1258851	95	1303	5' region of HP1187 and 3' region of HP1188
1257872	1259174	55	1302	5' region of HP1187, and HP1188
1257944	1259246	78	1302	HP1188
1258023	1259325	53	1302	HP1188
1263291	1263348	126	57	
1263291	1263405	69	114	
1267198	1281690	26	14492	
1382521	1382529	59	8	Noncoding region upstream of HP1322
1382521	1382537	51	16	Noncoding region upstream of HP1322
1382521	1382545	43	24	Noncoding region upstream of HP1322
1382521	1382553	35	32	Noncoding region upstream of HP1322
1382521	1382561	27	40	Noncoding region upstream of HP1322
1411265	1413469	39	2204	
1411306	1413510	50	2204	
1427542	1430724	41	3182	
1427584	1430766	38	3182	
1444160	1444175	26	15	
1477285	1477301	78	16	Noncoding region upstream of HP1408
1477285	1477317	62	32	Noncoding region upstream of HP1408

Chromosome	Chromosome	Length of	Distance	Sequences
location of	location of	repeat	between	
repeat 1	repeat 2	sequence, bp	repeat	flanked by paired repeats
			sequences, bp	in recombination hotspots*
1477285	1477333	46	48	Noncoding region upstream of HP1408
1477285	1477349	30	64	Noncoding region upstream of HP1408
1477577	1477585	27	8	Internal to HP1408
1477652	1477660	80	8	Internal to HP1408
1477652	1477668	72	16	Internal to HP1408
1477652	1477676	64	24	Internal to HP1408
1477652	1477684	56	32	Internal to HP1408
1477652	1477692	48	40	Internal to HP1408
1477652	1477700	40	48	Internal to HP1408
1477652	1477708	32	56	Internal to HP1408
1477652	1477716	24	64	Internal to HP1408
1503051	1612488	45	109437	
1503166	1612602	24	109436	
1503195	1612630	34	109435	
1503279	1612712	39	109433	
1508339	1508345	33	6	
1508339	1508351	27	12	
1524705	1614848	25	90143	
1544145	1544169	33	24	
1594849	1597149	27	2300	
1630356	1630916	27	560	
1642764	1643972	28	1208	HP1561
1642793	1644001	50	1208	HP1561, and 3' region of HP1562
1642844	1644052	290	1208	HP1561, and 3' region of HP1562
1643227	1644435	45	1208	5' region of HP1561 and 3' region of HP1562
1643367	1644575	64	1208	5' region of HP1561 and 3' region of HP1562
1643626	1644828	26	1202	5' region of HP1561 and 3' region of HP1562
1643753	1644955	30	1202	5' region of HP1561 and HP1562
1665166	1667514	66	2348	
1666104	1667114	80	1010	

Bold font indicates paired repeats fall within a recombination hotspot, defined a region $\leq 5,000$ bp containing ≥ 4 paired identical repeat sequences

*Gene designations were obtained from the TIGR database (www.tigr.org)