

Supplementary Table 1: Verified *C. elegans* FLP Assays

Chromosome	Assay Name	WormBase SNP	Position on Chromosome (nt)	Distance to next FLP Assay LEFT (kb)	Distance to next FLP Assay RIGHT (kb)	Oligo fwd	Oligo rev	Length Bristol (nt)	Length Hawaii (nt)	Change	GeneModels LEFT	GeneModels RIGHT
I	ZH1-16	pkP1099	470031	470.0	568.2	TTCTCGTGCAGTGGAAATGT	TCGGAGCGTGTTCGATGTATG	444	453	I9	81	90
	ZH1-17	snp_Y34D9[1]	1038236	568.2	686.7	TTTTTCAGATTTTTTGTGAAAGC	CGCCTTAAAGGTTACTGTAGC	114	115	I1	90	80
	ZH1-10a	snp_Y71G12[15]	1724899	686.7	546.2	TTCAAAAAAGTGGAAAACTGAGTT	CACTGGGTCTCTGTATCAACGTT	142	148	I6	80	79
	ZH1-25	snp_Y39G10AL[1]	2271065	546.2	392.1	TTGGTACCGAGTCAACACGA	ATTTCTGCCGAGTCACTACT	158	157	D1	79	84
	ZH1-07	snp_F40E3[4]	2663170	392.1	460.7	AGTAGAGTCTAACACACTATT	CTACAATGTAGTTCGCAATCT	132	130	D2	84	93
	ZH1-18a	snp_K09H9[2]	3123875	460.7	1433.3	AATATTTGATTTGGATCGTGC	TTAGAAGTAAATTTGCAGTACCA	240	235	D5	93	315
	ZH1-03	snp_Y119C18[8]	4557221	1433.3	279.9	GACCCGACTGCCGTTCTAT	CTGCGTCTCCCTATGTTCG	117	111	D6	315	74
	ZH1-27	snp_F57C9[1]	4837079	279.9	2607.6	CACAGAAGTTTCAAGTTACAG	AAATTTGAGGTGATTTTTCTCAT	222	223	I1	74	731
	ZH1-34	snp_ZK524[2]	7444723	2607.6	271.0	GAAAAACAATCGTACATAAAC	GCCTACACAGAAAGTATAGG	191	192	I1	731	62
	ZH1-21	snp_F27D4[1]	7715727	271.0	701.2	CAAAATTTCCGCTCGGTGAT	TTGGAAGATGGGGATGCACAA	176	169	D7	62	157
	ZH1-01	snp_F02E9[1]	8416904	701.2	871.1	TTTTGCGCTCAAATATGTGT	TGCTTTAACCTATATTTTGAATGCG	119	122	I3	157	229
	ZH1-22	snp_F14B4[1]	9287981	871.1	511.7	CTCGTTGTGAGACTTATGGAA	TCCATATTTTTTGGCTTCTGAGA	109	113	I4	229	149
	ZH1-23	snp_F26E4[4]	9799636	511.7	915.1	ATCAAAATTTCTTTCGCTTAATGAT	TAGGTGATTCATTTTTGCGGGAA	201	203	I2	149	220
	ZH1-15	snp_B0205[2]	10714726	915.1	616.5	GGCATTTTTTGGTCAACATTT	CGAAGACTTCTTAAAAGAGTGGCA	198	194	D4	220	130
	ZH1-05	snp_H25P06[2]	11331205	616.5	966.3	GAAATCGATTTCTCATTCAGTT	GCCTTGAACCCGCTGGT	328	348	I20	130	233
	ZH1-08	snp_F56H6[4]	12297522	966.3	533.5	GGGGAAAGCAGATAGACTC	CGCTTCCGAACACCACT	285	292	I7	233	156
	ZH1-09	Y18D10[5]	12831064	533.5	689.4	CATATCGAAAATCAATCCCCTA	AGGAAAAATAGCTGACCGAAT	248	244	D4	156	153
	ZH1-06	snp_Y87G2[5]	13520509	689.4	382.9	TCAAGAAAAACGGTCAATATGCA	CATTTGATCGCACATCGAACG	278	286	I8	153	67
	ZH1-24	snp_Y71A12B[2]	13903448	382.9	1175.6	ATGCTGAGCCCTTCACTCACT	ATTTATATCTGGAAGATATGCACTT	217	227	I10	67	237
	ZH2-15	snp_W07E6[7]	492112	492.1	459.6	AAAAATTCAAATGCTGCTATGAA	ATTTTTAGTTTTCAGCACACCTA	201	205	I4	131	126
	ZH2-04a	snp_C32B5[2]	951699	459.6	1153.8	TAAAAGTAGCTCTTGCCATCA	ATGACGATTTTCACTCGGAATCTAG	274	282	I8	126	350
	ZH2-05	snp_R52[2]	2105518	1153.8	664.2	TTACTAGAAGTTTTGAAACCCA	AAACTAGATTTGAACTCGCATT	155	150	D5	350	184
	ZH2-16	np133	2769668	664.2	541.9	AGTGATTTTCGATGCAAGTAGAA	TTCTCAACTCTCCAACCTGT	204	209	I5	184	166
ZH2-06a	snp_F39E9[2]	3311548	541.9	721.3	TAGCAGACCCCTCCGGA	CGCAGAGCAATCAATTTCA	298	289	D9	166	231	
ZH2-07	snp_K07D4[1]	4032873	721.3	656.9	CCTCCGAGACTATGGTGAA	AATTAAGCAGGCTGTCTCAAT	206	212	I6	231	138	
ZH2-17	snp_F10G7[4]	4689731	656.9	587.0	AATTAAGCAGGCTGCGGAT	CAAAACGAAGACTGCGGAT	208	204	D4	138	175	
ZH2-13	snp_C54A12[4]	5276767	587.0	979.3	CGTTTATTTGGAACCTCCCTCAGA	AGAGAAACGAAAATAACCCACGT	220	217	D3	175	318	
ZH2-19	snp_F13H8[2]	6256072	979.3	1032.4	AAGAAGGTATAGACTAGCAAGA	CAGTCTCTGTGTCGCTAGA	229	235	I6	318	319	
ZH2-01	snp_C30G12[2]	7288476	1032.4	524.1	ATGCTCCAATATGTCATCTTTT	TCTTAACCTACGGATTTGAGCAAT	136	148	I12	319	149	
ZH2-02	snp_T05A6[1]	7812597	524.1	799.4	CTGAGAGTACTATCAACATC	ATCTCTTCACTCAGCACACAT	255	263	I8	149	230	
ZH2-20	snp_F28C6[3]	8612029	799.4	571.0	ACATTACACTAGGAAAGTAGGT	TAGAAATCTGTCAACAAGGTT	240	231	D9	230	152	
ZH2-25	snp_T23G7[2]	9183058	571.0	1344.6	AGGTCCTTCGGTGGTTCGA	GCCCAAGGCTTTCTGACAG	218	219	I1	152	362	
ZH2-27	snp_R166[4]	10527682	1344.6	831.7	CCAGGAGAGTCCAGCCAT	CATTCAGTGATATCAGCAGTG	151	157	I6	362	191	
ZH2-09	snp_B0491[2]	11359409	831.7	446.2	CGAGAAAATCTCAAGTTACA	GGAGAAAGGTGATATAGTCGAT	109	101	D8	191	119	
ZH2-28	snp_F43G6[3]	11805581	446.2	825.0	AAAAATCCAAAGAACCCGAGA	CAATTAATCTGCTACGCTCA	177	173	D4	119	207	
ZH2-10	snp_Y38E10[3]	12630557	825.0	876.7	GTGATATAAAGATGCTGGAT	ATCCCAGCAGTGGTGGC	125	143	I18	207	164	
ZH2-11	snp_F54F11[3]	13507241	876.7	537.9	TCATCCAGTTTGTCCATTTGAA	CGGAGTTACAGGTGTTTTGTA	162	154	D8	164	125	
ZH2-12	snp_W01G7[2]	14045121	537.9	489.0	CCAACCTATGAACGTGCCAA	GGGAGTTACAAGATTAGAA	201	197	D4	125	95	
ZH2-23	snp_C04H5[1]	14534168	489.0	733.9	ACACTTTGTACCATTATTTGAA	CAACGGTGACGTTTTTCAGAA	201	210	I9	95	124	
ZH3-17a	snp_Y55B1BM[1]	416788	416.8	595.5	AGTGATATAGCTAGATACTTGG	GTCTGCTAAATTTTAGCATACC	157	160	I3	87	143	
ZH3-25	snp_Y34F4[2]	1012306	595.5	752.9	CGTCTGATGTTGCCACATTC	AGTTTGTATCTCGGAGACC	283	287	I4	143	176	
ZH3-06	snp_Y46E12[6]	1765177	752.9	563.0	TACTGTAGTTAGTCAAGACTAT	GGTGCAGTTACCATTTGAGAA	191	192	I1	176	94	
ZH3-07	snp_Y54F10BM[9]	2328170	563.0	633.7	ACATTTGGAGAGCTTTGAATCTT	TTCCGTGATATTTTGGTGAA	112	109	D3	94	122	
ZH3-08	snp_H05C05[5]	2961870	633.7	480.0	CGCGGGGTTAGAGGAAT	TTCCGAAAATGTTATAGCAAT	140	137	D3	122	98	
ZH3-26	snp_K01A11[3]	3441912	480.0	863.7	AGATTTTCGAGTCTGTACAG	ATCGGTTTCTACTTTGATGAT	226	224	D2	98	178	
ZH3-28	snp_H38K22[1]	4305611	863.7	516.5	TAATACCAAGATCACACAGAAC	TTTCTCGGTACAACCGGA	184	185	I1	178	149	
ZH3-15	snp_F26A1[2]	4822073	516.5	904.6	ACATTTGCGAGCAATTTCCCTGT	CGCTCACTTTGTTGGGAAAAG	203	202	D1	149	279	
ZH3-04	snp_B0336[6]	5726718	904.6	1533.5	ATCAGCAGAGAAATGTTTCCACA	CGAAATGAAGTGGGATTTGAT	229	232	I3	279	451	
ZH3-02	snp_T21D11[2]	7260267	1533.5	512.2	ACATCACTATCAAGTCAAGC	AAAGTGAAGAAATTTGCCAC	199	202	I3	451	109	
ZH3-05a	snp_ZK686[3]	7772487	512.2	918.9	CACTGAGGAGCAGCATTTT	AATGAGATCAAGAAATGAGCAA	176	178	I2	109	260	
ZH3-32	snp_F22B7[1]	8691426	918.9	329.7	TATTTGCCACGGTGTAAACAC	TATCTACAAGGACAGAGCAA	184	186	I2	260	101	
ZH3-35	snp_F59B2[1]	9021169	329.7	1032.9	GAAAACAAGTAACTAATGCTGC	AAGAAGTTTCAATGATTAAGGAC	252	253	I1	101	270	
ZH3-10a	snp_T16G12[2]	10054064	1032.9	658.4	GAATTTCCGCCATTTTGGCTA	GTGGTGAACCGTGGAGAGACT	147	143	D4	270	155	
ZH3-23	snp_W09D10[3]	10712445	658.4	686.8	CGGTCAGTCCAGAGCAT	TATGCAATGCAATTAATAATGTC	124	125	I1	155	127	
ZH3-11	snp_Y47D3B[3]	11399237	686.8	561.8	TCAACCTAGATCAAGCCGAA	CAACGTAGTCCGCTTACA	124	126	I2	127	104	
ZH3-12	snp_Y56A3[16]	11961081	561.8	567.1	AAATTCCTGAAAACCCGAA	CAAGTATTTGGTAAATGCCAA	196	202	I6	104	90	
ZH3-13	snp_Y111B2[7]	12528166	567.1	1253.4	GTGACGGTGTTCGAGACG	CATCGGAGCTGACAGTGT	229	233	I4	90	239	

Supplementary Table 1 (cont.): Verified *C. elegans* FLP Assays

Chromosome	Assay Name	WormBase SNP	Position on Chromosome	Distance to next FLP Assay LEFT (kb)	Distance to next FLP Assay RIGHT (kb)	Oligo fwd	Oligo rev	Length Bristol (nt)	Length Hawaii (nt)	Change	GeneModels LEFT	GeneModels RIGHT
IV	ZH4-04a	snp_Y55F3BR[6]	851112	851.1	889.1	CTTTTTTCCTGGAGTTTCCTAGG	TTCCGAATATTTTTTCATCCAAA	265	282	I17	175	164
	ZH4-05	snp_Y41D4[3]	1740251	889.1	1018.4	ACGAAATGAAAATCAGCAGTT	ATCCGGTGTCCGATACCCTT	144	119	I5	164	157
	ZH4-06	snp_Y54G2[2]	2758615	1018.4	1453.6	GGCTAGGCATAGATATAGTT	TTTTCCACCACGTTCAAACAT	147	144	D3	157	320
	ZH4-07	snp_K06B9[6]	4212198	1453.6	369.5	CATTTGGGGCGGTGCTGAA	TTCCAGAAATGTTTAAAGCGTA	165	172	I7	320	91
	ZH4-16	snp_F28E10[1]	4581704	369.5	1185.0	GGCGTGGGTGATAGCGTGA	TAAAGATTCTCCGACAAATCCA	246	251	I5	91	309
	ZH4-08	snp_F44E8[2]	5766666	1185.0	1160.1	GCCCGATGTGATCTGTCAAT	GGATCGGTGGAAAATACCA	200	192	D8	309	253
	ZH4-02	snp_T22D1[1]	6926779	1160.1	573.8	AGGAAAGATCATCATGATGAGA	TGCCAAACCAAACGAAAGT	179	186	I7	253	154
	ZH4-03	snp_F55G1[7]	7500574	573.8	557.5	CTGATGCTTTTTTCGGTGTACAAT	CTTTTGTCTGTTTGGATGAA	196	194	D2	154	155
	ZH4-17	snp_C18F3[1]	8058041	557.5	1252.6	TTAAAACCTCCAGGTCGAGTT	GACGTAACGAATACCGAGTA	168	169	I1	155	329
	ZH4-18	snp_F49C12[1]	9310637	1252.6	523.5	AAATGTTTGTGCCACATCTG	TTCAACTGATGAGACACGTCT	142	143	I1	329	153
	ZH4-09	pkP4081	9834093	523.5	1338.7	TGATTTGGCTTATCAAGTAA	CATTTGAATAATCCTTTGGAGAA	103	114	I11	153	384
	ZH4-19	snp_C08F8[2]	11172762	1338.7	932.0	CGGAAGTCTGAGTATTCGT	TCTGTCCGTTTGGCACG	170	173	I3	384	227
	ZH4-20	snp_M18[1]	12104785	932.0	807.7	CATCGTGGCTCCATTTTACA	CACCGAAAACGGAATCAGA	154	155	I1	227	190
	ZH4-10a	snp_K08D8[2]	12912468	807.7	717.0	TCAATTTGGCTGAAATGTAGCA	CCATGTTCTCTTCAACTTTTCG	217	211	D6	190	189
	ZH4-21	snp_C08F11[4]	13629499	717.0	615.6	GTTTAAACCCATAATGCTAAACA	TTTTTCTCGATCACACGCA	171	166	D5	189	118
	ZH4-11	pkP4094	14245143	615.6	925.8	GTTTTTAATGTGAAGCAGCAT	TACATACGATTTGATTTACGAT	205	212	I7	118	135
	ZH4-12	snp_Y40H7[3]	15170907	925.8	797.5	ATGTGACAAGTGGTGCAGC	AAGGGGACGGAGGAAGAT	168	173	I5	135	98
	ZH4-22	snp_Y105C58[23]	15968421	797.5	1522.0	TATATCGCAACTATCAACCAGT	TATTTGCCAGATAATCTCAA	182	185	I3	98	254
	ZH5-02a	snp_C05E4[5]	749319	749.3	801.7	GGTGCAACCTCACTCAACAA	TGCGAGCCGGATAGTTCIG	243	261	I18	209	146
	ZH5-13	pkP5101	1551061	801.7	688.4	TTGCAATACTTTTGTATCGCCA	GGCTTTTGTATCATCAACGAT	194	190	D4	146	189
	ZH5-03a	snp_F41B5[5]	2239502	688.4	1608.6	GGACTCCCACTGTTCCAGT	CGACTCTCGTGTGCTGTTG	170	176	I6	189	498
	ZH5-14	snp_F47C10[2]	3848148	1608.6	1333.1	GCTTTCCCTTGTAGATATC	CGGATAACAGGGCAGAGAT	183	190	I7	498	359
ZH5-04	snp_C03A7[4]	5181248	1333.1	366.8	GCTGAAGGAGATTGACCGTA	TTCCAGCAAAATCTGTCGCAA	173	169	D4	359	86	
ZH5-15	snp_C18C4[3]	5548085	366.8	1017.3	TGTAATTCAGCAGCTTAGACCA	ACCATTCTCAATTCACACGACT	144	145	I1	86	240	
ZH5-05	snp_K04A8[2]	6565411	1017.3	1236.5	TATCAATCGTAAATCCGACAT	AAACAGACTTACTCTGTTGTT	199	203	I4	240	388	
ZH5-16	snp_ZK742[1]	7801937	1236.5	1585.2	CCCAATTCAGAAATCTTGCTT	GTGGGTTGTTCAAGTGGAGGA	112	113	I1	388	472	
ZH5-01	snp_E02C12[8]	9387102	1585.2	621.6	TCTTTAATAGCTTGCAACTTCTT	GACATCGAGCTTTTCGGC	122	128	I6	472	180	
ZH5-17	snp_K08H10[1]	10008679	621.6	1275.5	TAGTTTTCCGTTGAOCTCTGA	AATACTTGGTTTTAGATAACGTA	195	190	D5	180	345	
ZH5-18	snp_C03E10[1]	11284131	1275.5	546.0	TGTTTATATCTGCGGTTCTCT	ATCCATATCGTCCCTTAATCG	222	225	I3	345	147	
ZH5-06	snp_D2023[10]	11830176	546.0	1512.8	GGACTGCTGAGATTTGGGA	ATTACAATTTCCCTCCACTGAA	100	95	D5	147	367	
ZH5-11	snp_C50B6[6]	13342985	1512.8	877.0	GGTCGCTGTTTTGGGTGAA	TGCAAAAGTCAAGGGTATCCC	186	190	I4	367	233	
ZH5-23	snp_T16A9[2]	14220019	877.0	1210.6	AAGTTTCACAAAATCTCTAAG	AATATTTTCGTATGTTGAGACTG	119	117	D2	233	373	
ZH5-12	snp_Y36E3[4]	15430591	1210.6	671.0	GCGCCAAACTCATATCATTACCAA	AAATCCAACCTGCCATGTAGTAAA	315	349	I34	373	257	
ZH5-20	snp_F22B8[2]	16101559	671.0	746.0	TGAAGTAGATGAGACTGGCAT	CGTTAATGTTCCGTTCAATTTCT	199	197	D2	257	245	
ZH5-08	snp_T20B3[1]	16847598	746.0	1300.1	GTTCAGTAGGTAACAATGCTT	GACAAATGGCAAAGTGGTTTCACT	165	169	I4	245	363	
ZH5-21	snp_C14A6[1]	18147681	1300.1	999.9	ACTACTTGAATATATCAAGGCTA	TGACTACACCTCACTGATGA	211	193	D18	363	234	
ZH5-09	snp_Y39B6[17]	19147608	999.9	902.5	TTGAGCAACCCAGCTCGAA	AGAAAAATTCGGTGGATAGT	200	205	I5	234	204	
ZH5-22	snp_Y113G7[6]	20050070	902.5	863.5	GAAAAATGCTGCTATCGTCCA	ACAAAAATTCGGAATTCACACAA	137	147	I10	204	195	
ZHX-16	snp_C02H7[1]	734252	734.3	476.4	TTTCAACGAGTATGCGGTGA	AGCATTGCCCGAGGGTTGA	184	186	I2	138	98	
ZHX-17	snp_C46H3[1]	1210652	476.4	880.0	AGACCTACGTTTCCAACCTCAA	AACAAGGACCTAGAAAAGATACT	159	163	I4	98	183	
ZHX-03	snp_F49H12[2]	2090657	880.0	1066.8	GTAATAAAAAATGTGGCGGTT	ACAGTGTCCGCTATGGCAT	170	165	D5	183	197	
ZHX-08	snp_C15C7[3]	3157420	1066.8	1219.8	GAGATTTTCATAAGCCTGAGA	GGACCGACCTCCCGAGTTT	129	125	D4	197	250	
ZHX-13	snp_R160[2]	4377207	1219.8	515.0	GCAGCGTCACTATGTTGG	TACTGTTTCAGTGGCTCGGAA	131	133	I2	250	104	
ZHX-15	snp_pkP6106	4892210	515.0	1563.2	TGTCCTCACTTGTCTCAGCT	CAACGGGAATGGGAAAACC	206	204	D2	104	315	
ZHX-10	snp_K04E7[1]	6455366	1563.2	1376.7	GGGGGAATTTGAGAGTGAA	TGCTGATTCATCCCCAGAT	200	207	I7	315	292	
ZHX-02	snp_C54D2[3]	7832035	1376.7	559.5	AATCGGAATTCGATACAACCTCAGTT	TTTATGGACCAAAACGGGT	250	258	I8	292	134	
ZHX-24	snp_F41D9[4]	8391581	559.5	1618.5	TAATTTTACTTCAAGCTCTG	TCACTGCCATGGACATCTGC	212	213	I1	134	345	
ZHX-07	pkP6138	10010095	1618.5	1454.5	TTTGTGAACGAACCTCTCAA	TTTTTCGAGTGGCTCATTTCA	193	186	D7	345	300	
ZHX-12	snp_T25C12[4]	11464550	1454.5	937.2	TCGTCCCACTCCCTTT	GGAGAAAAGTCCAGGAAAAGA	116	110	D6	300	194	
ZHX-11	snp_F17E5[1]	12401713	937.2	887.2	GATGTGATGAATGACTACCTT	CTCCAAGGATGACATTAAC	175	170	D5	194	162	
ZHX-05	snp_R04D3[5]	13288921	887.2	1140.5	TATGTGATTTGTTAATTTGAGCA	TTTACACTGTATAACACACTA	117	121	I4	162	245	
ZHX-21a	snp_F23D12[2]	14429469	1140.5	1131.4	GTGATTTTCTGCTTTGTTTAAAC	GTTTCTGTGCTTTTTCACATC	157	160	I3	245	200	
ZHX-06	snp_C02C6[1]	15560852	1131.4	875.5	TGGGAAAGATGGTGGTAA	ACTTTTAAGCAGCACTGAT	156	150	D6	200	142	
ZHX-22	snp_F38E9[2]	16436347	875.5	555.5	GATCAAAATGGATTCGATGCT	TCTCACTACACCAACAACCT	209	205	D4	142	99	
ZHX-23	snp_K02H8[1]	16991892	555.5	723.0	AAACGACATCCTTGAGTTTCA	GAAATTCGGCAAAATAAAGGT	138	134	D4	99	140	