GENETICS

Supporting Information
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A Molecularly Defined Duplication Set for the X Chromosome of *Drosophila melanogaster*

Koen J. T. Venken, Ellen Popodi, Stacy L. Holtzman, Karen L. Schulze, Soo Park, Joseph W. Carlson, Roger A. Hoskins, Hugo J. Bellen and Thomas C. Kaufman

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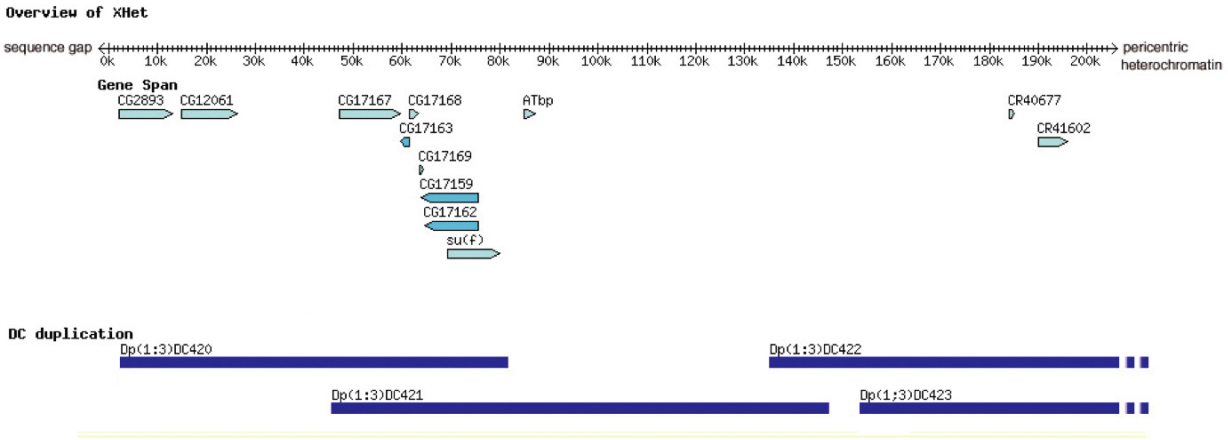

FIGURE S1.—Overview of the molecularly defined X chromosome duplication kit in the heterochromatic portion of the X chromosome sequence, XHet. The hash marked line at the top of this segment of the X chromosome represents the sequence coordinates (kb). The distribution of annotated gene spans (light blue arrows) is shown. The extents of molecularly mapped duplications (blue bars) are shown. The map was derived from the GBrowse representation of the XHet sequence in FlyBase.

TABLE S1

Genes and regions not covered by the X chromosome duplication kit

Class	Gene name	Abbreviation	kb
Large genes[a]	*CG32816*	*CG32816*	153.6
	dunce	*dnc*	162.9
	Allatostatin Receptor	*AlstR*	92.19
	rugose	*rg*	165.3
	retinal degeneration A	*rdgA*	113.4
	sprint	*spri*	94.96
	Tenascin accessory	*Ten-a*	138.3
	maternal gene required for meiosis	*mamo*	98.06
	dpr8	*dpr8*	140.1
	flotillin 2	*Flo2*	94.21
	Shaker	*Sh*	110.5
	CG32541	*CG32541*	96.52
	kekkon5	*kek5*	116.9
No appropriate clone[b]	*sidekick*	*sdk*	62.66
	CG42248	*CG42248*	76.25
	broad	*br*	51.03
	Tousled-like kinas	*tlk*	67.96
	stoned A/stoned B	*stnA/stnB*	23.93
Class	Clone end	Clone start	Overlap
Minimal overlap[c]	599328	592690	6638
	3654479	3647310	7169
	3668498	3668064	434
	9137981	9132271	5710
	13507192	13507029	163
	22377133	22376010	1123
	22396617	22395228	1389
Gaps[d]	1411111	1417499	6388
	2968483	2977133	8650
	10655943	10675193	19250
	21590231	21760040	169809
	22417460	NA	NA

18 genes are not covered in the duplication kit because they are too large to be contained in clones in the CHORI-321 library (13[a]) or no appropriate clone was found (5[b]). Twelve regions are present in the path as problematic sections that have insufficient overlap between adjacent tiling path clones encompassing one or more of the annotated genes (7[c]) or as a gap in clone coverage (5[d]).

TABLE S2

Overview of the transgenic tiling path[a]

Stock	Clone	Start	End	Length	Rescue	No rescue	Stocks used for rescue tests (*-failed to rescue)
				armX			
Dp(1;3)DC002	CH321-08O02	60,231	150,400	90,169			
Dp(1;3)DC003[b]	CH321-12B18	134,118	175,139	41,021	*ewg, cin*		4750; 11838
Dp(1;3)DC004	CH321-46A16	145,350	226,345	80,995	*ewg*	*cin*	4750; 11838
Dp(1;2)DC005	CH321-33H12	167,730	250,751	83,021			
Dp(1;3)DC006	CH321-32O15	222,186	301,176	78,990	*ac, sc*		4181; 176; 109
Dp(1;3)DC007	CH321-34A23	314,142	389,387	75,245	*Exp6*		4626
Dp(1;3)DC008	CH321-35G14	369,870	466,995	97,125			
Dp(1;3)DC009	CH321-46B03	438,474	535,364	96,890	*RpL36*		12266
Dp(1;3)DC010	CH321-04A18	493,728	599,328	105,600	*skpA, RpL36*		9265; 12266
Dp(1;3)DC011	CH321-11D11	497,212	537,601	40,389	*RpL36*		12266
Dp(1;3)DC012	CH321-32G05	612,646	707,231	94,585	*Rbf*		7435
Dp(1;3)DC013	CH321-47B04	669,926	775,592	105,666			
Dp(1;3)DC014	CH321-01A23	726,693	833,816	107,123			

Dp(1;3)DC019	CH321-08A12	914,195	1,028,609	114,414		
Dp(1;3)DC021	CH321-01K02	1,023,151	1,109,082	85,931		
Dp(1;3)DC022	CH321-29G13	1,097,334	1,173,061	75,727		
Dp(1;3)DC023	CH321-43I21	1,109,494	1,196,451	86,957		
Dp(1;3)DC025	CH321-08B18	1,177,422	1,271,517	94,095		
Dp(1;3)DC026	CH321-05G06	6,532,660	6,624,509	91,849		
Dp(1;3)DC029	CH321-35P01	1,534,564	1,625,783	91,219	*dor*	751; 35; 172; 761; 28*
Dp(1;3)DC030	CH321-02D20	1,587,716	1,691,991	104,275	*l(1)G0284*	11841
Dp(1;3)DC031	CH321-35B07	1,660,248	1,748,051	87,803		
Dp(1;3)DC033	CH321-17O06	1,744,378	1,787,142	42,764	*l(1)G0355*	11903
Dp(1;3)DC034	CH321-22J19	1,766,173	1,856,709	90,536	*l(1)G0355, arm*	8554; 8558; 3378*; 8557*; 9920
Dp(1;3)DC037	CH321-24E10	1,920,684	2,010,437	89,753	*Unc-76, usp, csw*	11701; 4660; 23874; 23873; 11843; 23875; 23876
Dp(1;3)DC038	CH321-04O23	1,985,917	2,071,410	85,493		
Dp(1;3)DC039	CH321-43N04	2,046,673	2,157,618	110,945	*crn, pn*	81; 174; 4292; 4592
Dp(1;3)DC045	CH321-25N08	2,388,337	2,495,693	107,356	*wds, egh*	3902; 11849; 3901*
Dp(1;3)DC046	CH321-25I09	2,425,091	2,520,841	95,750		
Dp(1;3)DC048	CH321-34G02	2,515,988	2,597,663	81,675		

Dp(1;3)DC050	CH321-23A22	2,644,611	2,738,512	93,901	*w*		derived from 5905; 5906
Dp(1;3)DC051	CH321-06D10	2,701,413	2,803,565	102,152			
Dp(1;3)DC052	CH321-04A01	2,778,344	2,881,506	103,162		*rst*	11530*
Dp(1;3)DC055	CH321-05D08	2,880,153	2,968,483	88,330			
Dp(1;3)DC056	CH321-05I04	3,037,949	3,137,899	99,950			
Dp(1;3)DC059	CH321-43P01	3,212,988	3,294,517	81,529			
Dp(1;3)DC060	CH321-42E18	3,241,349	3,331,682	90,333	*dm*		11935
Dp(1;3)DC061	CH321-29O06	3,312,416	3,353,480	41,064			
Dp(1;3)DC062	CH321-02B21	3,317,659	3,400,222	82,563			
Dp(1;3)DC063	CH321-35F23	3,357,858	3,439,092	81,234			
Dp(1;3)DC065	CH321-13B05	3,466,194	3,563,061	96,867			
Dp(1;3)DC067	CH321-32O23	3,668,064	3,776,288	108,224	*ec*		32
Dp(1;3)DC068	CH321-33A07	3,741,943	3,828,092	86,149	*VhaAC39*		14394
Dp(1;3)DC069	CH321-12D01	3,804,538	3,902,937	98,399			
Dp(1;3)DC070	CH321-21C12	3,882,916	3,984,186	101,270			
Dp(1;3)DC075	CH321-03I04	4,034,907	4,142,206	107,299			
Dp(1;3)DC076	CH321-01I21	4,114,546	4,195,139	80,593			

Dp(1;3)DC081	CH321-29F10	4,355,244	4,438,772	83,528	*CHOp24*	*rb*	18269; 88*
Dp(1;3)DC083	CH321-09J10	20,303,191	20,391,246	88,055			
Dp(1;3)DC085	CH321-12L02	20,433,537	20,525,130	91,593			
Dp(1;3)DC087	CH321-01B20	20,552,194	20,636,961	84,767	*run*		4497; 8128*; 4497*
Dp(1;3)DC088	CH321-25A14	20,577,938	20,662,305	84,367			
Dp(1;3)DC090	CH321-27E22	20,634,551	20,723,263	88,712	*shakB*		8132; 7478; 4769
Dp(1;3)DC092	CH321-05L19	20,692,920	20,776,945	84,025		*l(1)19Ec*	5739
Dp(1;3)DC095	CH321-09L05	20,867,594	20,951,725	84,131			
Dp(1;3)DC096	CH321-23M15	20,923,536	20,998,501	74,965	*unc*		7424; 4729* (4729; 18722; 8131)
Dp(1;3)DC097	CH321-82N07	282,379	366,982	84,603			
Dp(1;3)DC098	CH321-65F04	335,132	423,211	88,079			
Dp(1;3)DC099	CH321-72J11	592,690	686,551	93,861			
Dp(1;3)DC100	CH321-82L03	872,902	964,280	91,378			
Dp(1;3)DC101	CH321-77N16	953,467	1,047,109	93,642			
Dp(1;3)DC102	CH321-61O10	1,252,086	1,343,846	91,760			
Dp(1;3)DC103	CH321-23J17	1,417,499	1,517,006	99,507			
Dp(1;3)DC104	CH321-90H13	1,504,109	1,572,698	68,589	*dor*		751; 35; 172; 761; 28*

Dp(1;3)DC105	CH322-139B14	1,736,329	1,757,307	20,978			
Dp(1;3)DC106	CH322-76B11	1,901,106	1,925,089	23,983	*east*		15791; 12282*
Dp(1;3)DC107	CH321-66F10	2,236,075	2,318,716	82,641			
Dp(1;3)DC108	CH321-65P11	2,837,514	2,919,144	81,630		*rst*	11530
Dp(1;3)DC109	CH321-91P23	2,977,133	3,070,022	92,889	*N*		45; 118; 1715; 2209
Dp(1;3)DC111	CH321-65C18	3,385,304	3,484,547	99,243			
Dp(1;3)DC112	CH321-81P24	3,562,423	3,654,479	92,056			
Dp(1;3)DC113	CH322-176L18	3,647,310	3,668,498	21,188			
Dp(1;3)DC114	CH321-85H19	3,948,016	4,047,233	99,217	*brn*		4303; 7392
Dp(1;3)DC115	CH321-83B10	4,014,365	4,104,331	89,966			
Dp(1;3)DC116	CH321-78B16	4,289,931	4,382,150	92,219			
Dp(1;3)DC118	CH321-16O02	4,430,046	4,519,931	89,885			
Dp(1;3)DC120	CH321-61L05	4,555,057	4,642,455	87,398	*rap*, *ctp*		12241; 12297; 11851;11852; 11988; 11999; 12024; 12228; 11847; 11960*
Dp(1;3)DC122	CH321-49O15	4,665,773	4,753,894	88,121			
Dp(1;3)DC123	CH321-26F06	4,727,954	4,822,463	94,509			
Dp(1;3)DC124	CH321-56M21	4,801,159	4,891,952	90,793			

Dp(1;3)DC125	CH321-92O22	4,856,881	4,940,800	83,919			
Dp(1;3)DC126	CH321-22I01	4,883,716	4,972,748	89,032		*ovo*	816; 1309; 1318; 1326
Dp(1;3)DC127	CH321-68D03	4,959,088	5,044,400	85,312			
Dp(1;3)DC128	CH321-25A13	5,020,037	5,119,944	99,907			
Dp(1;3)DC129	CH321-76E09	5,099,430	5,197,901	98,471			
Dp(1;3)DC130	CH321-70G03	5,142,967	5,231,853	88,886			
Dp(1;3)DC131	CH321-60D21	11,810,379	11,887,528	77,149	*cac*		
Dp(1;3)DC132	CH321-77E01	14,830,471	14,927,542	97,071	*eag*		3561; 24184; 15038; 1442
Dp(1;3)DC133	CH321-71G22	15,747,740	15,818,253	70,513			
Dp(1;3)DC134	CH321-18K02	16,333,304	16,431,557	98,253	*CG4420, Rbp2, para*		23296; 1572
Dp(1;3)DC135	CH321-57O14	19,194,810	19,271,815	77,005			
Dp(1;3)DC136	CH321-83J08	5,198,863	5,297,858	98,995			
Dp(1;3)DC137	CH321-76C13	5,271,438	5,354,974	83,536			
Dp(1;3)DC138	CH321-10E01	5,325,461	5,415,296	89,812			
Dp(1;3)DC139	CH321-68H20	5,380,567	5,475,047	94,480			
Dp(1;3)DC140	CH321-94A13	5,434,183	5,522,071	87,888			
Dp(1;3)DC141	CH321-50H16	5,490,901	5,585,731	94,830			

Dp(1;3)DC142	CH321-62K01	5,536,879	5,612,724	75,845			
Dp(1;3)DC143	CH321-73A03	5,584,067	5,678,015	93,948		*l(1)G0060*	11653*
Dp(1;3)DC144	CH321-71J21	5,643,521	5,741,564	98,043			
Dp(1;3)DC145	CH321-04D19	5,703,819	5,797,720	93,901			
Dp(1;3)DC146	CH321-64D18	5,766,968	5,846,108	79,140			
Dp(1;3)DC147	CH321-82K03	5,820,079	5,902,948	82,869			
Dp(1;3)DC148	CH321-95F06	5,872,741	5,956,505	83,764			
Dp(1;3)DC149	CH321-84E21	5,906,454	6,008,412	101,958	*rux*		95; 1506
Dp(1;3)DC150	CH321-94H17	5,977,741	6,067,162	89,421			
Dp(1;3)DC151	CH321-76C11	6,044,550	6,124,198	79,648			
Dp(1;3)DC152	CH321-17L08	6,093,540	6,187,386	93,846	*sqh*		17616; 25712*; sqh[1] and sqh[AX3] (gifts from Roger Karess)
Dp(1;3)DC153	CH321-89L07	6,146,819	6,228,749	81,930			
Dp(1;3)DC154	CH321-35K04	6,185,575	6,287,643	102,068			
Dp(1;3)DC155	CH321-25H02	6,220,310	6,308,028	87,718			
Dp(1;3)DC156	CH321-46C02	6,266,152	6,350,688	84,536			
Dp(1;3)DC157	CH321-62P05	6,327,235	6,434,670	107,435			
Dp(1;3)DC158	CH321-50D09	6,413,450	6,486,728	73,278	*dx*		34

Dp(1;3)DC159	CH321-60B15	6,454,539	6,543,331	88,792			
Dp(1;3)DC160	CH321-26M04	6,484,339	6,575,128	90,789			
Dp(1;3)DC163	CH321-43C13	6,664,445	6,755,177	90,732			
Dp(1;3)DC164	CH321-74P07	6,715,409	6,808,437	93,028			
Dp(1;3)DC165	CH321-52K23	6,782,743	6,868,802	86,059			
Dp(1;3)DC166	CH321-65P16	6,846,820	6,933,749	86,929	*cm*		21; 22
Dp(1;3)DC169	CH321-76A05	7,002,447	7,092,979	90,532			
Dp(1;3)DC170	CH321-51P18	7,064,576	7,069,996	5,420			
Dp(1;3)DC172	CH321-80M12	7,160,086	7,247,807	87,721	*brk*		14953
Dp(1;3)DC173	CH321-84M19	7,214,311	7,294,130	79,819			
Dp(1;3)DC174	CH321-80G08	7,271,863	7,357,281	85,418			
Dp(1;3)DC175	CH321-04C07	7,318,567	7,331,072	12,505			
Dp(1;3)DC176	CH321-04E06	7,376,426	7,463,556	87,130			
Dp(1;3)DC177	CH321-72D19	7,431,308	7,525,585	94,277			
Dp(1;3)DC178	CH321-62C02	7,462,269	7,572,029	109,760		*ct*	22; 1502
Dp(1;3)DC179	CH321-64M20	7,545,875	7,621,317	75,442			
Dp(1;3)DC180	CH321-59L01	7,601,863	7,692,129	90,266	*Tom40*		11859

Dp(1;3)DC181	CH321-82O06	7,672,898	7,771,287	98,389			
Dp(1;3)DC183	CH321-66A08	7,835,622	7,936,544	100,922			
Dp(1;3)DC184	CH321-60P23	7,903,619	7,984,541	80,922	*mys*	*fs(1)h*	23863; 3169; 11862; 11964; 59*; 5285; 5286
Dp(1;3)DC185	CH321-24M24	7,947,324	8,045,669	98,345	*mys, Smox, CG2263*	*fs(1)h*	23863; 3169; 11862; 11964; 59*; 5285; 5286; 12246; 26625
Dp(1;3)DC186	CH321-18C02	8,023,740	8,095,848	72,108	*Smox*		12246
Dp(1;3)DC187	CH321-74I15	8,064,612	8,162,015	97,403	*sdt*		2181
Dp(1;3)DC188	CH321-40G15	8,113,597	8,193,403	79,806			
Dp(1;3)DC189	CH321-76A18	8,165,424	8,261,236	95,812			
Dp(1;3)DC190	CH321-75D02	8,228,819	8,322,102	93,283	*CG10555*		18277
Dp(1;3)DC191	CH321-09O19	8,282,577	8,368,218	85,641	*CG10555, Trf2*		118277; 11739; 12020; 11546; 11865; 11866; 11868; 11927; 11982; 12236; 12250; 12254; 12295; 11917*; 11867*; 11940*
Dp(1;3)DC192	CH321-28F18	8,345,702	8,401,072	55,370	*otu*		3146; 6025; 3022
Dp(1;3)DC193	CH321-80I04	8,373,682	8,470,436	96,754	*otu*	*Nrg*	3146; 6025; 3022; 5595; 5708*
Dp(1;3)DC194	CH321-69A10	8,441,040	8,537,535	96,495			
Dp(1;3)DC196	CH321-64J01	8,562,242	8,647,005	84,763	*l(1)G0020*		11474
Dp(1;3)DC197	CH321-38K07	8,626,580	8,727,131	100,551			
Dp(1;3)DC198	CH321-85N21	8,698,403	8,785,652	87,249			

Dp(1;3)DC199	CH321-50L02	8,764,981	8,846,709	81,728		
Dp(1;3)DC200	CH321-06K03	8,803,232	8,887,083	83,851		
Dp(1;3)DC201	CH321-88K03	8,855,073	8,955,034	99,961		
Dp(1;3)DC202	CH321-54E12	8,886,118	8,985,413	99,295		
Dp(1;3)DC203	CH321-23K20	8,953,354	9,037,987	84,633		
Dp(1;3)DC205	CH321-25D20	9,132,271	9,217,888	85,617	*amx*, *lz*, Df(1)Exel9049	2387; 18969; 9; 2387; 3509; 63; 13361; 7770
Dp(1;3)DC206	CH321-35L15	9,181,164	9,259,406	78,242		
Dp(1;3)DC207	CH321-25P23	9,226,649	9,323,924	97,275		
Dp(1;3)DC208	CH321-47G05	9,310,867	9,412,604	101,737		
Dp(1;3)DC209	CH321-01K05	9,386,182	9,476,853	90,671	*l(1)G0320*	11970; 14903
Dp(1;3)DC212	CH321-44B04	9,571,374	9,678,733	107,359	*CG15321*, *btd*	3294*; 26815; 14606; 11827; 15321
Dp(1;3)DC213	CH321-70K08	9,656,262	9,701,080	44,818		
Dp(1;3)DC214	CH321-73K06	9,667,644	9,762,360	94,716		
Dp(1;3)DC215	CH321-96N07	9,731,244	9,798,843	67,599		
Dp(1;3)DC216	CH321-85B05	9,774,292	9,856,525	82,233		
Dp(1;3)DC217	CH321-81O21	9,824,435	9,913,544	89,109		
Dp(1;3)DC218	CH321-61I05	9,894,372	9,974,236	79,864		

Dp(1;3)DC219	CH321-88M03	9,944,230	10,049,699	105,469			
Dp(1;3)DC220	CH321-45H07	10,021,269	10,098,677	77,408			
Dp(1;3)DC221	CH321-69O03	10,072,376	10,160,841	88,465	*Hk*, *l(1)G0230*		55; 3562; 11955
Dp(1;3)DC222	CH321-03G07	10,132,806	10,236,280	103,474			
Dp(1;3)DC223	CH321-67L01	10,189,699	10,301,052	111,353		*l(1)G0289*	11966*
Dp(1;3)DC224	CH321-64N06	10,262,993	10,358,571	95,578	*flw*		46; 186; 12287
Dp(1;3)DC225	CH321-81J16	10,337,489	10,443,139	105,650			
Dp(1;3)DC226	CH321-40J05	10,380,349	10,471,002	90,653			
Dp(1;3)DC227	CH321-70A18	10,447,560	10,529,147	81,587			
Dp(1;3)DC228	CH321-24B04	10,505,098	10,610,980	105,882			
Dp(1;3)DC229	CH321-18K03	10,556,240	10,655,943	99,703	*ras*		86; 1475; 87; 85
Dp(1;3)DC231	CH321-12K03	10,732,054	10,755,298	23,244		*feo*, *v*	4688*; 137*; 4771*
Dp(1;3)DC232	CH321-47A13	10,788,779	10,872,719	83,940	*v*		137; 4771
Dp(1;3)DC233	CH321-38F18	10,846,273	10,954,201	107,928			
Dp(1;3)DC234	CH321-52K09	10,935,295	11,040,029	104,734			
Dp(1;3)DC235	CH321-50P18	11,012,119	11,105,160	93,041	*ran*, *rtv*, *Dlic*		11800; 3297; 26635; 4694*; 5672; 11696; 11951
Dp(1;3)DC236	CH321-66A03	11,076,921	11,167,681	90,760			

Dp(1;3)DC237	CH321-64M10	11,156,728	11,257,276	100,548	*dsh, l(1)10Bb, Kap3*		9454; 5298; 14460; 11874; 18275; 4697; 4698*
Dp(1;3)DC238	CH321-67L16	11,230,570	11,331,135	100,565	*dsh, hop, dlg1*		9454; 5298; 6032; 8493; 8494; 11876*; 12301
Dp(1;3)DC239	CH321-40I20	11,283,584	11,375,370	91,786			
Dp(1;3)DC240	CH321-02B13	11,358,090	11,446,970	88,880			
Dp(1;3)DC241	CH321-05O16	11,414,580	11,511,438	96,858	*Rpll21, Kmn1*		3659; 11547; 6328; 3660; 3661; 1512*; 11877
Dp(1;3)DC243	CH321-74F04	11,565,555	11,657,465	91,910			
Dp(1;3)DC244	CH321-26N14	11,629,783	11,717,178	87,395	*m, dy*		69; 70; 30
Dp(1;3)DC245	CH321-01F21	11,696,587	11,777,898	81,311			
Dp(1;3)DC246	CH321-76G11	11,724,042	11,825,788	101,746	*wisp, pot*		4613; 11822*
Dp(1;3)DC247	CH321-60H11	11,865,729	11,955,286	89,557	*gd, tsg, fw*	*Usp7*	856; 3109; 15472; 2187; 6888; 141; 166; 194; 14505
Dp(1;3)DC249	CH321-32K23	11,965,250	12,044,346	79,096			
Dp(1;3)DC250	CH321-94M18	12,021,769	12,119,130	97,361			
Dp(1;3)DC251	CH321-36F14	12,094,285	12,182,936	88,651			
Dp(1;3)DC252	CH321-61H02	12,148,833	12,255,504	106,671			
Dp(1;3)DC253	CH321-66O15	12,225,073	12,326,149	101,076			
Dp(1;3)DC254	CH321-72G17	12,302,113	12,405,602	103,489			
Dp(1;3)DC255	CH321-85O14	12,377,449	12,472,434	94,985			

Dp(1;3)DC256	CH321-57A16	12,448,086	12,538,226	90,140		
Dp(1;3)DC257	CH321-47M02	12,507,477	12,596,743	89,266	*CkIalpha*	12303
Dp(1;3)DC258	CH321-63D20	12,565,768	12,645,624	79,856		
Dp(1;3)DC259	CH321-79I16	12,623,569	12,711,629	88,060		
Dp(1;3)DC260	CH321-57L04	12,668,601	12,760,253	91,652		
Dp(1;3)DC261	CH321-89F13	12,724,823	12,821,886	97,063		
Dp(1;3)DC262	CH321-40C11	12,793,350	12,890,192	96,842		
Dp(1;3)DC263	CH321-05H21	12,877,157	12,979,987	102,830		
Dp(1;3)DC264[b]	CH321-38B18	12,966,320	13,070,126	103,806	*hep, lic*	6761; 11880; 19989
Dp(1;3)DC265	CH321-71C23	13,010,163	13,097,393	87,230		
Dp(1;3)DC266[b]	CH321-03G21	13,078,876	13,170,717	91,841	*sno, mew*	8745; 14936; 12021; 12256; 1483
Dp(1;3)DC267	CH321-48B18	13,123,730	13,225,346	101,616	*comt*	26708; 27890
Dp(1;3)DC268	CH321-50L09	13,202,209	13,304,332	102,123		
Dp(1;3)DC269	CH321-92I12	13,278,663	13,358,819	80,156		
Dp(1;3)DC270	CH321-61M21	13,336,292	13,439,205	102,913		
Dp(1;3)DC271	CH321-77D16	13,427,494	13,507,192	79,698	*up*	25402; 25403
Dp(1;3)DC272	CH321-46K02	13,507,029	13,600,767	93,738		

Dp(1;3)DC273	CH321-23B06	13,572,670	13,654,767	82,097	*g*	*CG9940, CG32627*	18730; 3958; 50; 6888
Dp(1;3)DC274	CH321-75E20	13,625,879	13,717,113	91,234	*l(1)dd4, Rtc1, rdgB*		12139*; 26276; 5128; 22434; 26606
Dp(1;3)DC275	CH321-70M13	13,700,821	13,789,924	89,103	*Clic*	*mamo*	12267; 20116; 15725; 12270*; 26616
Dp(1;3)DC276	CH321-40P05	13,763,842	13,850,663	86,821			
Dp(1;3)DC277	CH321-79O21	13,825,587	13,912,171	86,584			
Dp(1;3)DC278	CH321-50H14	13,898,508	13,995,107	96,599			
Dp(1;3)DC279	CH321-23H09	13,980,844	14,072,048	91,204			
Dp(1;3)DC280	CH321-76M22	14,052,299	14,138,387	86,088			
Dp(1;3)DC281	CH321-56F05	14,120,818	14,167,180	46,362			
Dp(1;3)DC282	CH321-60I22	14,144,455	14,231,763	87,308	*na*		26702*; 2870; 3219
Dp(1;3)DC283	CH321-08C09	14,208,357	14,303,575	95,218			
Dp(1;3)DC284	CH321-23C05	14,281,687	14,380,814	99,127			
Dp(1;3)DC285	CH321-86L20	14,348,093	14,453,738	105,645			
Dp(1;3)DC286	CH321-80B07	14,416,492	14,517,238	100,746			
Dp(1;3)DC287	CH321-86C04	14,483,171	14,562,667	79,496			
Dp(1;3)DC288	CH321-90M01	14,536,415	14,634,964	98,549			
Dp(1;3)DC289	CH321-43E04	14,570,026	14,660,939	90,913			

Dp(1;3)DC290	CH321-74A04	14,623,162	14,729,318	106,156			
Dp(1;3)DC291	CH321-76F07	14,695,447	14,782,306	86,859			
Dp(1;3)DC292	CH321-77N20	14,757,418	14,849,775	92,357			
Dp(1;3)DC293	CH321-49O03	14,866,043	14,969,977	103,934			
Dp(1;3)DC294	CH321-38B08	14,943,838	15,049,464	105,626	*CG5599, drd*		14424; 24901; 27906
Dp(1;3)DC295	CH321-80K09	15,024,877	15,123,347	98,470			
Dp(1;3)DC296	CH321-25K03	15,094,315	15,185,062	90,747			
Dp(1;3)DC297	CH321-60I24	15,146,037	15,234,351	88,314	*Top1, dah*		5876; 4051; 10260; 11883; 11923; 12141; 5812
Dp(1;3)DC300	CH321-59E06	15,347,274	15,438,235	90,961	*shtd*	*Gmap*	9167; 9243; 11884
Dp(1;3)DC301	CH321-02F23	15,406,612	15,508,713	102,101			
Dp(1;3)DC302	CH321-25M17	15,463,770	15,547,165	83,395	*sog*		2497; 10132; 11908; 11944
Dp(1;3)DC303	CH321-02B24	15,514,343	15,598,410	84,067			
Dp(1;3)DC304	CH321-65G23	15,578,780	15,680,411	101,631			
Dp(1;3)DC305	CH321-82A12	15,627,515	15,719,364	91,849	*l(1)G0136, Tcp-1zeta, mRpL3*		11970; 14903; 11886; 11475; 11640; 11914; 21199; 26599
Dp(1;3)DC307	CH321-24B18	15,805,395	15,878,078	72,683			
Dp(1;3)DC308	CH321-64D01	15,842,372	15,940,525	98,153			

Dp(1;3)DC309	CH321-12N23	15,882,552	15,975,026	92,474	*exd*		3293
Dp(1;3)DC310	CH321-01L06	15,956,331	16,035,116	78,785			
Dp(1;3)DC311	CH321-93B12	16,021,790	16,119,384	97,594			
Dp(1;3)DC312	CH321-48H12	16,102,085	16,222,065	119,980			
Dp(1;3)DC313	CH321-28P07	16,203,601	16,295,792	92,191	*sl*		724; 5735
Dp(1;3)DC314	CH321-84K01	16,248,840	16,336,721	87,881			
Dp(1;3)DC316	CH321-89E23	16,423,270	16,517,720	94,450	*Arp14D*		18728
Dp(1;3)DC317	CH321-20I24	16,491,981	16,530,847	38,866		*rok*	6666; 6665
Dp(1;3)DC318	CH321-63I13	16,555,435	16,637,981	82,546			
Dp(1;3)DC319	CH321-08C14	16,612,889	16,695,133	82,244	*if*		3960; 2176; 2177
Dp(1;3)DC320	CH321-49N08	16,666,044	16,768,094	102,050	*CG9609*		26624
Dp(1;3)DC321	CH321-45A15	16,733,202	16,812,601	79,399			
Dp(1;3)DC322	CH321-62B18	16,786,371	16,865,737	79,366	*wus*		26604
Dp(1;3)DC323	CH321-26M15	16,852,198	16,936,822	84,624			
Dp(1;3)DC324	CH321-57C16	16,907,462	17,004,671	97,209			
Dp(1;3)DC325	CH321-64E02	16,991,608	17,076,840	85,232	*RpS5a, xmas-2*		73; 72; 26628; 5624; 438; 18731
Dp(1;3)DC327	CH321-56I13	17,102,134	17,207,001	104,867	*f*		24643

Dp(1;3)DC328	CH321-04D11	17,182,234	17,271,638	89,404			
Dp(1;3)DC329	CH321-85I09	17,255,096	17,345,649	90,553			
Dp(1;3)DC330	CH321-57P05	17,330,037	17,432,976	102,939		*CG8557*	11916
Dp(1;3)DC331	CH321-09C05	17,419,318	17,511,357	92,039	*CG8557, l(1)G0222*		11916; 11969; 2138
Dp(1;3)DC333	CH321-57C10	17,556,779	17,628,713	71,934			
Dp(1;3)DC334	CH321-16L02	17,582,661	17,674,922	92,261			
Dp(1;3)DC335	CH321-28E09	17,647,942	17,748,446	100,504			
Dp(1;3)DC336	CH321-26P04	17,679,946	17,771,399	91,453			
Dp(1;3)DC337	CH321-16E18	17,737,492	17,782,536	45,044	*CG32557*		26631
Dp(1;3)DC338	CH321-65J09	17,771,396	17,852,888	81,492			
Dp(1;3)DC339	CH321-49B17	17,807,424	17,900,478	93,054			
Dp(1;3)DC340	CH321-62B23	17,870,853	17,973,767	102,914			
Dp(1;3)DC341	CH321-90A16	17,947,777	18,032,189	84,412	*scu*		4753
Dp(1;3)DC342	CH321-43H08	18,006,627	18,101,564	94,937			
Dp(1;3)DC343	CH321-83A14	18,070,838	18,152,488	81,650			
Dp(1;3)DC344	CH321-35O24	18,135,634	18,218,307	82,673	*os*		79; 4767
Dp(1;3)DC345	CH321-91O05	18,189,748	18,282,159	92,411	*os*		79; 4767

Dp(1;3)DC346	CH321-32C05	18,253,837	18,345,202	91,365	*por*	*CrebB-17a*	4720; 4740; 4768
Dp(1;3)DC347	CH321-90G02	18,323,698	18,421,829	98,131	*Aats-his*		11919; 11983
Dp(1;3)DC349	CH321-85P03	18,465,463	18,544,208	78,745			
Dp(1;3)DC351	CH321-23G04	18,563,850	18,674,780	110,930			
Dp(1;3)DC352	CH321-08P09	18,650,979	18,739,417	88,438			
Dp(1;3)DC353	CH321-59N15	18,684,078	18,787,773	103,695			
Dp(1;3)DC354	CH321-67L15	18,753,898	18,842,610	88,712			
Dp(1;3)DC355	CH321-29P23	18,814,970	18,922,904	107,934			
Dp(1;3)DC356	CH321-73C20	18,879,516	18,956,682	77,166			
Dp(1;3)DC357	CH321-38G09	18,922,191	19,018,644	96,453			
Dp(1;3)DC358	CH321-12L09	19,004,927	19,098,945	94,018			
Dp(1;3)DC360	CH321-09L23	19,132,757	19,222,718	89,961			
Dp(1;3)DC361	CH321-85F19	19,245,460	19,354,130	108,670			
Dp(1;3)DC362	CH321-71B04	19,333,463	19,435,040	101,577	*l(1)G0156*		11895
Dp(1;3)DC363	CH321-63C20	19,412,004	19,495,403	83,399			
Dp(1;3)DC364	CH321-35A10	19,457,711	19,548,245	90,534	*e(y)3, car*	*RpS10b*	71*; 10270; 11910; 11996; 19; 20
Dp(1;3)DC365	CH321-35O18	19,518,790	19,610,762	91,972	*e(y)3, dome, Mer, Cdc42*		12030; 10270; 8783; 7337*, 9104

Dp(1;3)DC366	CH321-78C01	19,581,404	19,681,595	100,191
Dp(1;3)DC367	CH321-22D01	19,652,058	19,744,242	92,184
Dp(1;3)DC368[b]	CH321-15P17	19,722,764	19,812,047	89,283
Dp(1;3)DC369	CH321-32H16	19,792,101	19,877,335	85,234
Dp(1;3)DC370	CH321-64P06	19,852,817	19,967,982	115,165
Dp(1;3)DC371	CH321-56O15	19,945,274	20,042,811	97,537
Dp(1;3)DC372[b]	CH321-15K12	20,016,288	20,093,231	76,943
Dp(1;3)DC374	CH321-67B20	20,121,311	20,230,462	109,151
Dp(1;3)DC376	CH321-89O15	20,977,000	21,071,763	94,763
Dp(1;3)DC377	CH321-22G22	21,055,433	21,162,261	106,828
Dp(1;3)DC378	CH321-80M04	21,108,947	21,195,965	87,018
Dp(1;3)DC379	CH321-49O10	21,181,795	21,274,943	93,148
Dp(1;3)DC380	CH321-57I03	21,241,481	21,339,859	98,378
Dp(1;3)DC381	CH321-57K01	21,314,883	21,391,373	76,490
Dp(1;3)DC382	CH321-07G07	21,357,939	21,454,951	97,012
Dp(1;3)DC383	CH321-86F13	21,436,635	21,520,438	83,803
Dp(1;3)DC384	CH321-26A04	21,510,805	21,590,231	79,426

Dp(1;3)DC386	CH321-68G11	21,639,762	21,668,653	28,891
Dp(1;3)DC388[b]	CH321-02C06	21,760,040	21,846,888	86,848
Dp(1;3)DC389	CH321-74N13	21,838,120	21,930,713	92,593
Dp(1;3)DC390	CH321-92I13	21,906,419	21,990,597	84,178
Dp(1;3)DC391	CH321-18C11	21,959,714	22,044,474	84,760
Dp(1;3)DC392	CH321-44M14	22,021,164	22,104,749	83,585
Dp(1;3)DC393	CH321-11A23	22,074,314	22,166,031	91,717
Dp(1;3)DC394	CH321-03D13	22,141,642	22,230,802	89,160
Dp(1;3)DC395	CH321-02G02	22,193,129	22,277,508	84,379
Dp(1;3)DC396	CH321-91D06	22,238,631	22,325,962	87,331
Dp(1;3)DC397	CH321-23E16	22,292,953	22,377,133	84,180
Dp(1;3)DC398	CH322-157H18	22,376,010	22,396,617	20,607
Dp(1;3)DC399	CH322-08D09	22,395,228	22,417,460	22,232
Dp(1;3)DC400	CH321-60O02	818,683	903,494	84,811
Dp(1;3)DC401	CH321-35C02	1,310,607	1,408,895	98,288
Dp(1;3)DC402	CH321-70H05	1,798,539	1,886,984	88,445
Dp(1;3)DC403	CH321-35D08	2,119,813	2,202,550	82,737

Dp(1;3)DC404	CH321-24F19	2,189,174	2,269,907	80,733		
Dp(1;3)DC405	CH321-63M03	2,343,233	2,433,294	90,061		
Dp(1;3)DC406	CH321-23G14	2,564,781	2,666,509	101,728		
Dp(1;3)DC408	CH321-19N24	4,287,083	4,330,023	42,940		
Dp(1;3)DC409	CH321-05J07	20,242,727	20,313,025	70,298		
Dp(1;3)DC410	CH321-74K24	20,759,966	20,844,272	84,306		
Dp(1;3)DC411	CH321-57D08	20,809,404	20,894,989	85,585		
Dp(1;3)DC412	CH321-61L15	1,430,891	1,479,092	48,201		
Dp(1;3)DC413	CH321-72K03	1,892,853	1,987,447	94,594	*east, Actn, usp, Unc-76*	15791; 12282; 4655; 11802; 4660; 29974; 10610; 11701; 11942; 12293
Dp(1;3)DC414	CH321-80H02	16,387,410	16,467,611	80,201	*Arp14D*	18728
Dp(1;3)DC415	CH321-54K14	7,073,355	7,154,758	81,403		
Dp(1;3)DC416	CH321-24E24	7,100,243	7,199,996	99,753		
Dp(1;3)DC417	CH321-28D07	7,311,576	7,401,745	90,169		
Dp(1;3)DC426	CH321-45H09	5,505	93,312	87,807		
Dp(1;3)DC430	CH321-77C08	383,715	480,982	97,267		
Dp(1;3)DC437	CH321-78N18	1,136,724	1,227,905	91,181		

Dp(1;3)DC439	CH321-67B16	1,191,491	1,270,133	78,642
Dp(1;3)DC444	CH321-95C06	1,651,817	1,743,654	91,837
Dp(1;3)DC446	CH321-53P22	1,697,827	1,796,766	98,939
Dp(1;3)DC452	CH321-71A19	2,290,954	2,383,929	92,975
Dp(1;3)DC453	CH321-80E15	2,333,186	2,423,349	90,163
Dp(1;3)DC454	CH321-61I14	2,357,929	2,449,183	91,254
Dp(1;3)DC459	CH321-63C23	3,099,173	3,191,865	92,692
Dp(1;3)DC460	CH321-60A08	3,164,302	3,252,703	88,401
Dp(1;3)DC463	CH321-76J08	3,520,821	3,612,213	91,392
Dp(1;3)DC465	CH321-93H14	4,022,358	4,121,982	99,624
Dp(1;3)DC466	CH321-89O05	4,153,354	4,224,441	71,087
Dp(1;3)DC467	CH321-78M17	4,197,024	4,283,288	86,264
Dp(1;3)DC468	CH321-60A09	4,275,896	4,347,684	71,788
Dp(1;3)DC472	CH321-09K05	4,514,694	4,601,048	86,354
Dp(1;3)DC473	CH321-85P17	4,582,421	4,697,579	115,158
Dp(1;3)DC479	CH321-74F19	5,211,645	5,321,905	110,260
Dp(1;3)DC486	CH321-71K04	6,616,430	6,708,982	92,552

Dp(1;3)DC489	CH321-72B18	6,887,492	6,990,060	102,568		
Dp(1;3)DC490	CH321-17P22	6,930,928	7,044,200	113,272		
Dp(1;3)DC494[b]	CH321-48H18	7,710,486	7,803,844	93,358		
Dp(1;3)DC495	CH321-69D16	7,765,016	7,837,916	72,900		
Dp(1;3)DC501	CH321-50F05	9,008,174	9,099,018	90,844		
Dp(1;3)DC503	CH321-36M02	9,405,624	9,499,552	93,928		
Dp(1;3)DC504	CH321-24L24	9,465,692	9,554,972	89,280		
Dp(1;3)DC550	CH321-51D08	19,558,685	19,655,042	96,357	*dome, Cdc42, Mer*	10263; 11953; 11971; 12009; 12030; 8783; 9104; 9103*
Dp(1;3)DC551	CH321-06A05	19,598,757	19,699,228	100,471		
Dp(1;3)DC572	CH321-82G19	8,480,082	8,585,732	105,650	*oc - partial*	24
			XHet			
Dp(1;3)DC420	CH321-05N21	2,721	81,472	78,751		
Dp(1;3)DC421	CH321-74P23	45,803	147,046	101,243		
Dp(1;3)DC422	CH321-18E16	135,373	204,112[c]	>68,739		
Dp(1;3)DC423	CH321-90G01	153,883	204,112[c]	>50,229		

[a]The transgenic tiling path is organized according to DC number for the euchromatic portion (armX) and the pericentric heterochromatin (XHet) of the X chromosome.
[b]BAC ends of 7 clones, Dp(1;3)DC003 (CH321-12B18), Dp(1;3)DC264 (CH321-38B18), Dp(1;3)DC266 (CH321-03G21), Dp(1:3)DC368 (CH321-15P17), Dp(1;3)DC372 (CH321-15K12), Dp(1;3)DC388 (CH321-02C06) and Dp(1;3)DC494 (CH321-48H18) map within tandem duplications in the genome sequence. BAC end coordinates for 5 of these BACs were determined by

analysis of restriction digestion patterns and rare sequence variation in the repeats. The right end coordinates of Dp(1;3)DC264 (CH321-38B18) and Dp(1:3)DC368 (CH321-15P17) remain ambiguous; the coordinates reported correspond to the coordinate resulting in the shorter cloned insert size.
[c]BAC ends of two clones, Dp(1;3)DC422 (CH321-18E16) and Dp(1;3)DC423 (CH321-90G01), extend beyond XHet into an unsequenced gap in the genome; their right end coordinates are defined here by the last coordinate of the genomic sequence.

TABLE S3

Phenotypes associated with transgenic insertions

#	Duplication	Clone	Phenotype	potential gene involved
1	Dp(1;3)DC006	CH321-32O15	Hw phenotype. Homozygotes rare. Homozygous male sterile.	*achaete*, *scute*
2	Dp(1;3)DC329	CH321-85I09	Bar eye phenotype. Homozygotes rare.	*BarH1*
3	Dp(1;3)DC109	CH321-91P23	Confluens phenotype in wing veins. Homozygous viable and fertile.	*Notch*
4	Dp(1;3)DC275	CH321-70M13	Heterozygotes and homozygotes hold wings out and are flightless. Homozygous viable and fertile. Homozygous males may be reduced in number.	
5	Dp(1;3)DC179	CH321-64M20	Heterozygous males hold wings out slightly and are flightless. Homozygotes rare with reduced viability and held out wings.	
6	Dp(1;3)DC310	CH321-01L06	Heterozygous males hold wings out. Homozygotes are rare.	
7	Dp(1;3)DC374	CH321-67B20	Wing hinge area is dark similar to speck. Homozygous viable and fertile.	
8	Dp(1;3)DC197	CH321-38K07	Wings are often crumpled or necrotic, this is more common in males. The bristles around the eyes may show abnormalities and this may occasionally affect the shape of the eye. Homozygotes rare.	*Lim1* mis-expression
9	Dp(1;3)DC327	CH321-56I13	Homozygotes have bent macro- and microchaete. Homozygous viable and fertile.	*forked*
10	Dp(1;3)DC244	CH321-26N14	Homozygotes have thin bristles. Homozygous viable and fertile.	
11	Dp(1;3)DC145	CH321-04D19	Homozygotes have thin short bristles and are rare.	
12	Dp(1;3)DC060	CH321-42E18	Homozygotes hold wings out and are sickly with reduced fertility.	
13	Dp(1;3)DC118	CH321-16O02	Homozygous adults are "jittery". Homozygous viable and fertile.	
14	Dp(1;3)DC416	CH321-24E24	Homozygous males hold wings out and are flightless. Homozygous viable and fertile.	
15	Dp(1;3)DC070	CH321-21C12	Homozygous males hold wings out. Homozygous viable and fertile.	
16	Dp(1;3)DC297	CH321-60I24	Homozygous males hold wings out. Homozygous viable and fertile.	
17	Dp(1;3)DC097	CH321-82N07	Homozygous males are rare. Homozygous viable and fertile. Homozygotes exhibit a weak Hw phenotype.	*sc* for the Hw phenotype
18	Dp(1;3)DC312	CH321-48H12	Males are sub-viable. Heterozygous males are reduced in number with very reduced fertility.	
19	Dp(1;3)DC344	CH321-35O24	Males are sub-vital. Males with one copy of the duplication are rare but fertile. Homozygotes are absent.	
20	Dp(1;3)DC087	CH321-01B20	Males sub-vital. Males carrying a single copy of the duplication are reduced in number (approximately 1/2 to 2/3 the expected number of males in the balanced stock). Homozygotes are rare.	
21	Dp(1;3)DC194	CH321-69A10	Post-eclosion male lethal, males carrying a single copy of the duplication eclose, are very weak and die. They do not mate (but have motile sperm). Heterozygotes have wings held out and are flightless.	*oc* or *Nrg* mis-expression
22	Dp(1;3)DC068	CH321-33A07	Semi male lethal. Males carrying even a single copy of the duplication are very rare (2 to 8% the expected number) but	

			fertile.
23	Dp(1;3)DC271	CH321-77D16	Semi male lethal. Males carrying even a single copy of the duplication are very rare but fertile.
24	Dp(1;3)DC334	CH321-16L02	Semi male lethal. Heterozygous males very rare and probably sterile (n=1).
25	Dp(1;3)DC104	CH321-90H13	Homozygous viable. Homozygous male sterile.
26	Dp(1;3)DC148	CH321-95F06	Homozygous viable. Homozygous male sterile.
27	Dp(1;3)DC158	CH321-50D09	Homozygous viable. Homozygous male sterile.
28	Dp(1;3)DC160	CH321-26M04	Homozygous viable. Homozygous male sterile.
29	Dp(1;3)DC181	CH321-82O06	Homozygous viable. Homozygous male sterile.
30	Dp(1;3)DC184	CH321-60P23	Homozygous viable. Homozygous male sterile.
31	Dp(1;3)DC262	CH321-40C11	Homozygous viable. Homozygous male sterile.
32	Dp(1;3)DC311	CH321-93B12	Homozygous viable. Homozygous male sterile.
33	Dp(1;3)DC126	CH321-22I01	Homozygotes rare with reduced fertility.
34	Dp(1;3)DC325	CH321-64E02	Homozygotes rare with reduced fertility.
35	Dp(1;3)DC004	CH321-46A16	Homozygotes rare.
36	Dp(1;3)DC030	CH321-02D20	Homozygotes rare.
37	Dp(1;3)DC106	CH322-76B11	Homozygotes rare.
38	Dp(1;3)DC124	CH321-56M21	Homozygotes rare.
39	Dp(1;3)DC140	CH321-94A13	Homozygotes rare.
40	Dp(1;3)DC147	CH321-82K03	Homozygotes rare.
41	Dp(1;3)DC192	CH321-28F18	Homozygotes rare.
42	Dp(1;3)DC209	CH321-01K05	Homozygotes rare.
43	Dp(1;3)DC258	CH321-63D20	Homozygotes rare.
44	Dp(1;3)DC430	CH321-77C08	Homozygotes rare.
45	Dp(1;3)DC304	CH321-65G23	Homozygotes rare.
46	Dp(1;3)DC316	CH321-89E23	Homozygotes rare.
47	Dp(1;3)DC232	CH321-47A13	Homozygotes rare.
48	Dp(1;3)DC347	CH321-90G02	Homozygotes rare.
49	Dp(1;3)DC336	CH321-26P04	Homozygotes rare.
50	Dp(1;3)DC337	CH321-16E18	Homozygotes rare.
51	Dp(1;3)DC363	CH321-63C20	Homozygotes rare.

52	Dp(1;3)DC031	CH321-35B07	Homozygotes rare.
53	Dp(1;3)DC046	CH321-25I09	Homozygotes rare.
54	Dp(1;3)DC039	CH321-43N04	Homozygotes viable. Homozygous female fertility reduced. Homozygous male fertility not known.
55	Dp(1;3)DC002	CH321-08O02	Homozygotes viable. Homozygous females exhibit reduced fertility.
56	Dp(1;3)DC235	CH321-50P18	Homozygous viable. Homozygous female sterile.
57	Dp(1;3)DC377	CH321-22G22	Homozygous viable and fertile. Development somewhat delayed.
58	Dp(1;3)DC285	CH321-86L20	Homozygous viable and fertile. Homozygotes developmentally delayed.
59	Dp(1;3)DC354	CH321-67L15	Homozygous viable but may have reduced fertility.
60	Dp(1;3)DC321	CH321-45A15	Homozygous viable but weak.
61	Dp(1;3)DC250	CH321-94M18	Homozygous viable with reduced fertility.
62	Dp(1;3)DC281	CH321-56F05	Homozygous viable. Homozygous males exhibit reduced fertility.
63	Dp(1;3)DC301	CH321-02F23	Homozygous viable. Homozygous males exhibit reduced fertility.
64	Dp(1;3)DC324	CH321-57C16	Homozygous viable. Homozygous male have reduced fertility.
65	Dp(1;3)DC318	CH321-63I13	Homozygous viable. Homozygous male sterile.