

Table S1. Excluded deficiencies

Deficiency	Bloomington Stock	Breakpoints	Coordinate start	Coordinate end	Reason Discarded
Chromosome 1					
Df(1)BSC662	26514	7D6;7F1	8010281	8383646	Impossible
Df(1)BSC766	26863	11E9;12A7	13195231	13485587	Minute
Df(1)Exel6245	7718	11E11;11F4	13213906	13305678	Minute
Df(1)BSC714	26566	13E14;14A8	15652384	15980061	Impossible
Df(1)FDD-0230186	27408	14C1;14E1	16268326	16420365	Minute
Df(1)FDD-0230908	23296	14C6;14E1	16336383	16420365	Minute
Df(1)Exel7463	7761	17C2;17D3	18428598	18635466	Minute
Df(1)ED7413	8037	17D1;17F1	18551286	18757770	Minute
Df(1)ED7424	9350	17D1;18C1	18551286	19192806	Minute
Df(1)Exel6253	7721	18D13;18F2	19557049	19682746	Minute
Chromosome 2L					
Df(2L)ED62	8937	21D1;21E2	480873	826788	Sick stock
Df(2L)Exel7011	7783	22E1;22F3	2362917	2492447	Impossible
Df(2L)BSC692	26544	23B3;23B7	2830265	2868633	Minute
Df(2L)BSC692	26544	23B3;23B7	2830265	2868633	Minute
Df(2L)BSC292	23677	23F6;24A2	3515462	3632008	Impossible
Df(2L)BSC217	9694	24D8;24F1; 23D1;26C1-2	4197799	4403405	Minute
Df(2L)ED250	9270	24F4;25A7	4477085	4821294	Impossible
Df(2L)BSC52	8471	25A1--3;25B6--8	4577825	4971244	Impossible
Df(2L)ED270	8039	25F2;25F5	5658629	5800196	Long pupal phenotype in wild type
Df(2L)ED320	8902	25F2;26B2	5658629	5999643	Long pupal phenotype in wild type
Df(2L)ED279	9271	25F2;26A1	5658629	5907456	Long pupal phenotype in wild type
Df(2L)ED334	9343	25F2;26B2	5658629	5999667	Long pupal phenotype in wild type
Df(2L)ED623	8930	29C1;29E4	8403564	8700124	Impossible
Df(2L)ED776	7418	33E4;34A3	12434538	12975028	Sick stock
Df(2L)ED777	7419	33E7;34A3	12484452	12975028	Sick stock in NF1 ^{E2}
Df(2L)ED784	7421	34A4;34B6	13004448	13332060	Sick stock in NF1 ^{E2}
Df(2L)BSC159	9594	34B4;34C4; 32F;35B1-2	13290761	13536086	Minute
Df(2L)BSC812	27383	34B11;34E1	13421556	13878659	Impossible
Df(2L)ED1102	24113	35F12;36A10	16350236	16684883	Sick stock in NF1 ^{E2}
Df(2L)Exel8038	7840	36E5;36F5	18123514	18455586	Minute

Df(2L)ED1196	24115	36E6;37B1	18151698	18823590	Minute
Df(2L)ED1317	9175	38D1;38F5	20638580	20917519	Sick stock in NF1 ^{E2}
Chromosome 2R					
Df(2R)ED1484	9683	42A2;42A14	1781142	2132933	Impossible
Df(2R)ED1612	8045	42A13;42E6	2108037	2937177	Impossible
Df(2R)ED1770	9157	44D5;45B4	4543134	5095046	Sick stock
Df(2R)BSC298	23682	46B2;46C7	5621779	5845625	Sick stock
Df(2R)ED2098	9277	47A7;47C6	6304366	6786711	Sick stock
Df(2R)ED2076	8909	47A10;47C1	6364289	6707491	Impossible
Df(2R)BSC153	9540	48C1;48D7	7566603	7907386	Impossible
Df(2R)BSC361	24385	50C3;50F1	9648768	10179666	Minute
Df(2R)BSC134	9496	50E1;50E6;49A;51EF	10063602	10153306	Minute
Df(2R)BSC357	24381	50F6;51C1	10251391	10601192	Impossible
Df(2R)Exel7144	7888	53C8;53D2	12459438	12578579	Minute
Df(2R)ED3181	9213	53C9;53F10	12471454	12996322	Minute
Df(2R)ED1	6916	53E4;53F8	12914232	12984827	Sick stock
Df(2R)Exel7162	7896	56F11;56F16	16132691	16201140	Minute
Df(2R)BSC462	24966	57B5;57C8	16862884	17068495	Sick stock
Df(2R)BSC598	25431	58F3;59A1	18529284	18566186	Minute
Df(2R)BSC602	25435	60C8;60E5	20320443	20815875	Sick stock in NF1 ^{E2}

Listed deficiencies were excluded for the reasons indicated. Deficiencies that failed to produce screening stocks are labeled 'Impossible'. Unhealthy (sick) deficiencies or those that uncovered *Minute* mutations were also excluded.