

**Table S1. Rat and Mouse piRNA Clusters.**

Cluster(s)	Coordinates of cluster(s)*	Length of cluster(s)	Genomic context of cluster(s)	Evolution of cluster(s)	Number of rat paralogs	Number of mouse paralogs	Paralogous cluster(s)	Rearrangements occurring after acquisition of cluster(s)
Rat 38	chr9:105120000-105160000	40001	Intergenic	Acquired after rat-mouse divergence	>2	>2	Rat 28 / Mouse 16, Rat 37, Rat 74	Chromosomal rearrangements
Rat 99	chr17:20354000-20367000	13001	Intergenic	Acquired after rat-mouse divergence	0	0		Inversion of cluster region
Rat 39	chr1:47839000-47873000	34001	Intergenic	Acquired after rat-mouse divergence	>2	>2	Rat 49, Rat 56, Rat 86	Inversion of rodent-specific predicted gene flanking cluster
Rat 56	chr1:47729000-47753000	24001	Intergenic	Acquired after rat-mouse divergence	>2	>2	Rat 39, Rat 49, Rat 86	Inversion of rodent-specific predicted gene flanking cluster
Rat 65	chr15:84157000-84160000	3001	Intergenic	Acquired after rat-mouse divergence	1	0	Rat 81	None
Mouse 84	chr8:35860000-35873000	13001	Intergenic	Acquired after rat-mouse divergence	0	>2	Mouse 70	None
Mouse 35	chr10:85297000-85334000	37001	Intergenic	Acquired after rat-mouse divergence	>2	>2	Mouse 42, Mouse 54	None
Rat 42	chr5:25405000-	25001	Intergenic	Acquired after	>2	>2	Rat 59	Complex

	25430000			rat-mouse divergence				rearrangements
Rat 52	chr3:140578000-140591000	13001	Intergenic	Acquired after rat-mouse divergence	>2	1	Rat 5 / Mouse 6, Rat 21 / Mouse 46, Rat 24 / Mouse 41, Rat 32, Rat 45, Rat 53, Rat 55 / Mouse 58, Rat 72, Rat 73, Rat 85 / Mouse 68/89, Mouse 51, Mouse 63	Complex rearrangements
Rat 59	chr5:25621000-25636000	15001	Intergenic	Acquired after rat-mouse divergence	>2	>2	Rat 42	Complex rearrangements
Rat 72	chr3:140378000-140397000	19001	Intergenic	Acquired after rat-mouse divergence	>2	0	Rat 5 / Mouse 6, Rat 21 / Mouse 46, Rat 24 / Mouse 41, Rat 32, Rat 45, Rat 52, Rat 53, Rat 55 / Mouse 58, Rat 73, Rat 85 / Mouse 68/89, Mouse 51, Mouse 63	Complex rearrangements
Rat 53	chr3:140041000-140077000	36001	Intergenic	Acquired after rat-mouse divergence	>2	0	Rat 5 / Mouse 6, Rat 21 / Mouse 46, Rat 24 / Mouse 41, Rat 32, Rat 45, Rat 52, Rat 55 / Mouse 58, Rat 72, Rat 73, Rat 85 / Mouse 68/89, Mouse 51,	Inversion near cluster

							Mouse 63	
Rat 71	chrX:124261000-124262000	1001	Intergenic	Acquired after rat-mouse divergence	>2	0	Rat 91	Complex rearrangements
Mouse 50	chr8:91999000-92013000	14001	Intergenic	Acquired after rat-mouse divergence	0	0		Interchromosomal insertion of flanking gene and insertion of intergenic DNA near cluster
Mouse 34	chr6:128190000-128224000	34001	Intergenic	Acquired after rodent-primate divergence	1	1		Large insertion of intergenic DNA near cluster
Rat 20 / Mouse 20	chr10:92629000-92654000 / chr11:103533000-103559000	25001 / 26001	Intergenic	Acquired after rodent-primate divergence	0	0		Inversion of flanking gene
Rat 24 / Mouse 41	chr4:119527000-119539000 / chr6:85140000-85156000	12001 / 16001	Intergenic	Acquired after rodent-primate divergence	>2	>2	Rat 5 / Mouse 6, Rat 21 / Mouse 46, Rat 32, Rat 45, Rat 52, Rat 53, Rat 55 / Mouse 58, Rat 72, Rat 73, Rat 85 / Mouse 68/89, Mouse 51, Mouse 63	None
Rat 32	chr3:140968000-140994000	26001	Intergenic	Acquired after rodent-primate divergence	>2	0	Rat 5 / Mouse 6, Rat 21 / Mouse 46, Rat 24 / Mouse 41, Rat 45, Rat 52,	Complex rearrangements

							Rat 53, Rat 55 / Mouse 58, Rat 72, Rat 73, Rat 85 / Mouse 68/89, Mouse 51, Mouse 63	
Rat 35 / Mouse 27	chr4:116384000- 116396000 / chr6:81912000- 81933000	12001 / 21001	Intergenic	Acquired after rodent- primate divergence	0	0		None
Rat 48 / Mouse 24	chr1:184495000- 184506000 / chr7:121421000- 121461000	11001 / 40001	Intergenic	Acquired after rodent- primate divergence	0	0		None
Rat 67	chr11:82952000- 82970000	18001	Intergenic	Acquired after rodent- primate divergence	>2	>2		None
Rat 76 / Mouse 64	chr5:143156000- 143164000 / chr4:123278000- 123287000	8001 / 9001	Intergenic	Acquired after rodent- primate divergence	0	0		None
Rat 86	chr1:51025000- 51039000	14001	Intergenic	Acquired after rodent- primate divergence	>2	>2	Rat 39, Rat 49, Rat 56	Insertion of intergenic DNA on both sides of cluster
Rat 90	chr4:165034000- 165054000	20001	Intergenic	Acquired after rodent- primate divergence	>2	>2		Complex rearrangements
Mouse 63	chr14:22077000-	36001	Intergenic	Acquired after	1	>2	Rat 5 / Mouse 6,	Chromosomal

	22113000			rodent-primate divergence			Rat 21 / Mouse 46, Rat 24 / Mouse 41, Rat 32, Rat 45, Rat 52, Rat 53, Rat 55 / Mouse 58, Rat 72, Rat 73, Rat 85 / Mouse 68/89, Mouse 51	fission near cluster region
Mouse 48	chr5:142790000-142801000	11001	Intergenic	Acquired after rodent-primate divergence	0	0		None
Mouse 85	chr13:24271000-24273000	2001	Intergenic	Acquired after rodent-primate divergence	0	0		None
Mouse 92	chr4:123336000-123342000	6001	Intergenic	Acquired after rodent-primate divergence	0	0		None
Rat 17 / Mouse 21	chr5:79245000-79257000 / chr4:61654000-61673000	12001 / 19001	Intergenic	Acquired after rodent-primate divergence	1	1		Inversion of cluster region
Rat 37	chr9:105449000-105469000	20001	Intergenic	Acquired after rodent-primate divergence	>2	>2	Rat 28 / Mouse 16, Rat 38, Rat 74	Interchromosomal insertion of flanking genes on one side of cluster and inversion of intergenic DNA near cluster

Rat 43	chr17:17515000-17556000	41001	Intergenic	Acquired after rodent-primate divergence	2	1	Mouse 60	Interchromosomal insertion of flanking genes on one side of cluster and inversions of flanking genes on both sides of cluster
Rat 46 / Mouse 42	chr7:18786000-18819000 / chr10:86113000-86163000	33001 / 50001	Intergenic	Acquired after rodent-primate divergence	>2	>2		Interchromosomal insertion and inversion of flanking genes on one side of cluster
Rat 54	chr1:102090000-102111000	21001	Intergenic	Acquired after rodent-primate divergence	>2	>2	Rat 58, Rat 61 / Mouse 45	Interchromosomal insertion of flanking genes on one side of cluster and inversion of cluster region
Rat 58	chr1:103000000-103019000	19001	Intergenic	Acquired after rodent-primate divergence	>2	>2	Rat 54, Rat 61 / Mouse 45	Interchromosomal insertion of flanking genes on one side of cluster and insertion of intergenic DNA
Rat 61 / Mouse 45	chr1:102827000-102845000 / chr7:49122000-49150000	18001 / 28001	Intergenic	Acquired after rodent-primate divergence	>2	>2	Rat 54, Rat 58	Interchromosomal insertion of flanking genes on one side of cluster and inversion of intergenic DNA

								near cluster
Rat 74	chr9:105273000-105298000	25001	Intergenic	Acquired after rodent-primate divergence	>2	>2	Rat 28 / Mouse 16, Rat 37, Rat 38	Interchromosomal insertion of flanking genes on one side of cluster and inversion of cluster region
Rat 80	chr5:79201000-79204000	3001	Intergenic	Acquired after rodent-primate divergence	0	0		Inversion of cluster region
Rat 93	chr10:90649000-90661000	12001	Intergenic	Acquired after rodent-primate divergence	0	0		Inversion of flanking gene
Rat 40,57 / Mouse 91	chr2:105696000-105728000, 105657000-105694000 / chr3:20186000-20211000	32001, 37001 / 25001	Intergenic	Acquired after rodent-primate divergence	>2	>2		None
Mouse 54	chr10:86171000-86183000	12001	Intergenic	Acquired after rodent-primate divergence	>2	>2		Interchromosomal insertion and inversion of flanking genes on one side of cluster
Mouse 39	chr14:17284000-17311000	27001	Intergenic	Acquired after rodent-primate divergence	>2	>2	Mouse 26	Chromosomal rearrangements
Mouse 60	chr13:52433000-	7001	Intergenic	Acquired after	1	1	Rat 43	Interchromosomal

	52440000			rodent- primate divergence				insertion of flanking genes on one side of cluster and inversion of flanking genes
Mouse 70	chr8:26050000- 26065000	15001	Intergenic	Acquired after rodent- primate divergence	0	1	Mouse 84	2 large deletions at boundaries of cluster in rodents
Mouse 31	chr2:151143000- 151162000	19001	Intergenic	Acquired after rodent- primate divergence	>2	>2	Mouse 36	Inversion of flanking genes on one side of cluster
Rat 23 / Mouse 30	chr3:141656000- 141670000 / chr2:151055000- 151073000	14001 / 18001	Intergenic	Acquired after rodent- primate divergence	>2	>2	Rat 30 / Mouse 29	Inversion of flanking genes on one side of cluster
Rat 29	chr11:84973000- 85028000	55001	Intergenic	Acquired after rodent- primate divergence	0	0		Inversion of flanking genes on one side of cluster
Rat 30 / Mouse 29	chr3:141591000- 141601000 / chr2:150989000- 151008000	10001 / 19001	Intergenic	Acquired after rodent- primate divergence	>2	>2	Rat 23 / Mouse 30	Inversion of flanking genes on one side of cluster
Rat 47 / Mouse 61	chr4:120368000- 120385000 / chr6:86062000- 86079000	17001 / 17001	Intergenic	Acquired after rodent- primate divergence	0	0		Inversion of flanking genes on one side of cluster
Rat 81	chr10:36520000- 36523000	3001	Intergenic	Acquired after rodent-	1	0	Rat 65	Inversion of flanking genes on



				primate divergence				one side of cluster
Mouse 26	chr14:40245000-40263000	18001	Intergenic	Acquired after rodent-primate divergence	>2	>2	Mouse 39	Inversion of flanking genes on one side of cluster
Mouse 36	chr2:150882000-150899000	17001	Intergenic	Acquired after rodent-primate divergence	>2	>2	Mouse 31	Inversion of flanking genes on one side of cluster
Mouse 65	chr13:49938000-49944000	6001	Intergenic	Acquired after rodent-primate divergence	>2	>2	Mouse 86	Inversion of flanking genes on one side of cluster
Mouse 81	chr14:40079000-40097000	18001	Intergenic	Acquired after rodent-primate divergence	>2	>2		Inversion of flanking genes on one side of cluster
Rat 33	chr12:42905000-42939000	34001	Intergenic	Acquired after rodent-primate divergence	>2	1		Inversion of cluster region
Rat 73	chr2:105598000-105623000	25001	Intergenic	Acquired after rodent-primate divergence	>2	>2	Rat 5 / Mouse 6, Rat 21 / Mouse 46, Rat 24 / Mouse 41, Rat 32, Rat 45, Rat 52, Rat 53, Rat 55 / Mouse 58, Rat 72, Rat 85 / Mouse 68/89, Mouse 51, Mouse 63	Inversion of flanking genes on one side of cluster

Mouse 38	chr15:83436000-83450000	14001	Intergenic	Acquired after rodent-primate divergence	0	0	Rat 60	Inversion of cluster and flanking gene
Mouse 28	chr10:66270000-66293000	23001	Intergenic	Acquired after rodent-primate divergence	0	>2		None
Rat 60	chr7:121600000-121604000	4001	Intergenic	Acquired after rodent-primate divergence	0	1	Mouse 38	Inversion of flanking genes on one side of cluster
Rat 63 / Mouse 33	chr9:92473000-92479000 / chr1:92900000-92905000	6001 / 5001	Intergenic	Unknown	0	0		None
Mouse 67	chr13:51154000-51161000	7001	Intergenic	Unknown	0	0		None
Rat 49	chrUn:42595000-42641000	46001	Intergenic	Not analyzed	>2	>2	Rat 39, Rat 56, Rat 86	n/a
86	chr17:20779000-20785000	6001	Intergenic	Not analyzed	>2	>2	Mouse 65	n/a
Rat 31	chr17:20742000-20810000	68001	Intergenic	Ancestral	0	0		Inversion of flanking genes on one side of cluster
Rat 85 / Mouse 68, 89	chr17:20188000-20198000 / chr13:49820000-49833000, 49373000-49377000	10001 / 13001, 4001	Intergenic	Ancestral	>2	>2	Rat 5 / Mouse 6, Rat 21 / Mouse 46, Rat 24 / Mouse 41, Rat 32, Rat 45, Rat 52, Rat 53, Rat 55 / Mouse 58, Rat	Inversion of flanking genes on one side of cluster

							72, Rat 73, Rat 85 / Mouse 68/89, Mouse 51, Mouse 63	
Rat 16 / Mouse 15	chr7:112772000- 112797000 / chr15:74701000- 74752000	25001 / 51001	Intergenic	Ancestral	0	0		None
Rat 36 / Mouse 32	chr5:75292000- 75303000 / chr4:57398000- 57406000	11001 / 8001	Intergenic	Ancestral	0	0		None
Rat 79 / Mouse 66	chr9:90835000- 90839000 / chr1:91310000- 91314000	4001 / 4001	Intergenic	Ancestral	0	0		None
Rat 97	chr12:11152000- 11160000	8001	Intergenic	Ancestral	0	0		None
Rat 41,51 / Mouse 44	chr1:13931000- 13959000, 13901000- 13927000 / chr10:18519000- 18554000	28001, 26001 / 35001	Intergenic	Ancestral	0	0		None
Rat 68 / Mouse 72	chr13:37654000- 37658000 / chr1:125054000- 125057000	4001 / 3001	Intergenic	Ancestral	0	0		None
Rat 1 / Mouse 1	chr20:5480000- 5581000 / chr17:25458000-	101001 / 95001	Intergenic	Ancestral	0	0		None

	25553000							
Rat 2 / Mouse 5	chr4:164469000- 164546000 / chr6:127799000- 127879000	77001 / 80001	Intergenic	Ancestral	0	0		None
Rat 5 / Mouse 6	chr1:129070000- 129164000 / chr7:69622000- 69701000	94001 / 79001	Intergenic	Ancestral	0	0	Rat 21 / Mouse 46, Rat 24 / Mouse 41, Rat 32, Rat 45, Rat 52, Rat 53, Rat 55 / Mouse 58, Rat 72, Rat 73, Rat 85 / Mouse 68/89, Mouse 51, Mouse 63	None
Rat 6 / Mouse 13	chr8:57725000- 57777000 / chr9:54236000- 54298000	52001 / 62001	Intergenic	Ancestral	0	0		None
Rat 7 / Mouse 2	chr8:72069000- 72129000 / chr9:67715000- 67803000	60001 / 88001	Intergenic	Ancestral	0	0		None
Rat 8	chr12:5597000- 5633000	36001	Intergenic	Ancestral	0	0		None
Rat 9 / Mouse 14	chr7:68946000- 69002000	60001 / 56001	Intergenic	Ancestral	0	0		None
Rat 10 / Mouse 17	chr5:114521000- 114575000 / chr4:93669000- 93725000	54001 / 56001	Intergenic	Ancestral	0	0		None
Rat 12 /	chr7:96057000-	59001 /	Intergenic	Ancestral	0	0		Inversion of

Mouse 9	96116000 / chr15:59313000- 59370000	57001						flanking gene
Rat 18	chr15:218000- 262000	44001	Intergenic	Ancestral	0	1	Mouse 12	None
Rat 19 / Mouse 37	chr19:40002000- 40017000 / chr8:108718000- 108731000	15001 / 13001	Intergenic	Ancestral	0	0		None
Rat 25	chr19:15907000- 15945000	38001	Intergenic	Ancestral	0	0	Mouse 25	None
Rat 28 / Mouse 16	chr9:105522000- 105551000 / chr17:64393000- 64458000	29001 / 65001	Intergenic	Ancestral	>2	>2	Rat 37, Rat 38, Rat 74	Inversion of cluster region
Rat 34 / Mouse 43	chr5:154408000- 154412000 / chr4:134996000- 135009000	4001 / 13001	Intergenic	Ancestral	0	0		None
Rat 44 / Mouse 75	chr12:20765000- 20783000 / chr5:135888000- 135908000	18001 / 20001	Intergenic	Ancestral	0	0		None
Rat 45	chr4:119575000- 119601000	26001	Intergenic	Ancestral	>2	>2	Rat 5 / Mouse 6, Rat 21 / Mouse 46, Rat 24 / Mouse 41, Rat 32, Rat 52, Rat 53, Rat 55 / Mouse 58, Rat 72, Rat 73, Rat 85 / Mouse 68/89, Mouse 51,	None

							Mouse 63	
Rat 50 / Mouse 59	chr1:241697000- 241724000 / chr19:36956000- 36962000	27001 / 6001	Intergenic	Ancestral	0	0		None
Rat 62	chr14:41998000- 42011000	13001	Intergenic	Ancestral	0	0		None
Rat 64	chr9:7094000- 7096000	2001	Intergenic	Ancestral	0	0		None
Rat 69	chr17:18976000- 19001000	25001	Intergenic	Ancestral	0	0		None
Rat 84	chr6:93598000- 93616000	18001	Intergenic	Ancestral	0	0		None
Rat 87 / Mouse 77	chr7:31878000- 31887000 / chr10:94234000- 94238000	9001 / 4001	Intergenic	Ancestral	0	0		None
Rat 91	chrX:123931000- 123946000	15001	Intergenic	Ancestral	>2	0	Rat 71	None
Rat 92 / Mouse 79	chrX:152895000- 152918000 / chrX:62174000- 62206000	23001 / 32001	Intergenic	Ancestral	0	0		None
Rat 94	chr2:44320000- 44347000	27001	Intergenic	Ancestral	0	0		None
Rat 95 / Mouse 47	chr2:121139000- 121146000 / chr3:34676000- 34687000	7001 / 11001	Intergenic	Ancestral	0	0		None
Mouse 25	chr8:90782000-	13001	Intergenic	Ancestral	1	0	Rat 25	None

	90795000							
Mouse 82	chr1:57602000-57611000	9001	Intergenic	Ancestral	0	0		None
Mouse 90	chr13:20869000-20871000	2001	Intergenic	Ancestral	0	0		None
Mouse 93	chr10:84029000-84037000	8001	Intergenic	Ancestral	0	0		None
Mouse 7	chr5:112507000-112564000	57001	Intergenic	Ancestral	0	0		Interchromosomal movement of flanking genes on one side of cluster
Mouse 62	chr17:47253000-47256000	3001	Intergenic	Ancestral	0	0		None
Rat 11 / Mouse 11	chr1:124891000-124959000 / chr7:65734000-65810000	68001 / 76001	Intergenic	Ancestral	0	0		None
Rat 89	chr20:22761000-22765000	4001	Intergenic	Ancestral	0	0		None
Mouse 87	chr8:115820000-115829000	9001	Intergenic	Ancestral	0	0		None
Rat 66 / Mouse 55	chr4:165701000-165712000 / chr6:128462000-128474000	11001 / 12001	Overlapping gene(s)	Ancestral	0	0		Inversion of flanking genes on one side of cluster
Rat 3 / Mouse 4	chr3:76817000-76892000 / chr2:92374000-92462000	75001 / 88001	Overlapping gene(s)	Ancestral	0	0		None
Rat 4 /	chr6:122540000-	84001 /	Overlapping	Ancestral	0	0		None

Mouse 8	122624000 / chr12:95876000- 95950000	74001	gene(s)					
Rat 13 / Mouse 18	chr12:44134000- 44189000 / chr5:114033000- 114076000	55001 / 43001	Overlapping gene(s)	Ancestral	0	0		Inversion of flanking genes on one side of cluster
Rat 14 / Mouse 3	chr18:63622000- 63658000 / chr18:67419000- 67485000	36001 / 66001	Overlapping gene(s)	Ancestral	0	0		Multiple inversions of flanking genes
Rat 15	chr20:13186000- 13223000	37001	Overlapping gene(s)	Ancestral	0	1	Mouse 19	Inversion of flanking genes on one side of cluster
Rat 21 / Mouse 46	chr3:115118000- 115142000 / chr2:127432000- 127445000	24001 / 13001	Overlapping gene(s)	Ancestral	1	1	Rat 5 / Mouse 6, Rat 24 / Mouse 41, Rat 32, Rat 45, Rat 52, Rat 53, Rat 55 / Mouse 58, Rat 72, Rat 73, Rat 85 / Mouse 68/89, Mouse 51, Mouse 63	Inversion of flanking genes on one side of cluster
Rat 22 / Mouse 40	chr4:122403000- 122440000 / chr6:88042000- 88069000	37001 / 27001	Overlapping gene(s)	Ancestral	0	0		Inversion of flanking genes on one side of cluster
Rat 26 / Mouse 23	chr20:29911000- 29965000 / chr10:62171000- 62224000	54001 / 53001	Overlapping gene(s)	Ancestral	0	0		None



Rat 27 / Mouse 22	chr7:116628000- 116678000 / chr15:78725000- 78767000	50001 / 42001	Overlapping gene(s)	Ancestral	0	0		None
Rat 55 / Mouse 58	chr2:221181000- 221209000 / chr3:124237000- 124263000	28001 / 26001	Overlapping gene(s)	Ancestral	1	1	Rat 5 / Mouse 6, Rat 21 / Mouse 46, Rat 24 / Mouse 41, Rat 32, Rat 45, Rat 52, Rat 53, Rat 72, Rat 73, Rat 85 / Mouse 68/89, Mouse 51, Mouse 63	None
Rat 70	chr13:73630000- 73667000	37001	Overlapping gene(s)	Ancestral	0	0		None
Rat 75	chrUn:15394000- 15406000	12001	Overlapping gene(s)	Ancestral	0	0		None
Rat 77	chr12:27425000- 27443000	18001	Overlapping gene(s)	Ancestral	0	1	Mouse 80	None
Rat 78	chr7:94716000- 94745000	29001	Overlapping gene(s)	Ancestral	0	0		None
Rat 82	chr1:92677000- 92707000	30001	Overlapping gene(s)	Ancestral	0	0		None
Rat 83 / Mouse 71	chr9:90967000- 90984000 / chr1:91445000- 91467000	17001 / 22001	Overlapping gene(s)	Ancestral	0	0		None
Rat 88 / Mouse 49	chr8:47138000- 47143000 / chr9:44078000- 44086000	5001 / 8001	Overlapping gene(s)	Ancestral	0	0		None

Rat 96	chr15:187000-217000	30001	Overlapping gene(s)	Ancestral	0	0		None
Rat 98	chr5:63093000-63106000	13001	Overlapping gene(s)	Ancestral	0	0		None
Rat 100 / Mouse 94	chr10:84482000-84488000 / chr11:95874000-95880000	6001 / 6001	Overlapping gene(s)	Ancestral	0	0		Interchromosomal movement of flanking gene
Mouse10	chr5:148721000-148766000	45001	Overlapping gene(s)	Ancestral	0	0		None
Mouse 12	chr14:21743000-21796000	53001	Overlapping gene(s)	Ancestral	1	0	Rat 18	Interchromosomal movement of flanking genes on one side of cluster
Mouse 19	chr10:75491000-75537000	46001	Overlapping gene(s)	Ancestral	1	0	Rat 15	None
Mouse 51	chr14:22009000-22038000	29001	Overlapping gene(s)	Ancestral	1	1	Rat 5 / Mouse 6, Rat 21 / Mouse 46, Rat 24 / Mouse 41, Rat 32, Rat 45, Rat 52, Rat 53, Rat 55 / Mouse 58, Rat 72, Rat 73, Rat 85 / Mouse 68/89, Mouse 63	None
Mouse 52	chr10:127189000-127202000	13001	Overlapping gene(s)	Ancestral	0	0		None
Mouse 53	chr7:27076000-27084000	8001	Overlapping gene(s)	Ancestral	0	0		None
Mouse 56	chr11:108102000-	5001	Overlapping	Ancestral	0	0		Large insertion

	108107000		gene(s)					into intron of overlapping gene
Mouse 57	chr5:134131000-134139000	8001	Overlapping gene(s)	Ancestral	0	0		None
Mouse 69	chr9:51827000-51831000	4001	Overlapping gene(s)	Ancestral	0	0		None
Mouse 73	chr15:73176000-73188000	12001	Overlapping gene(s)	Ancestral	0	0		None
Mouse 74	chr5:101021000-101040000	19001	Overlapping gene(s)	Ancestral	0	0		None
Mouse 76	chr15:80000000-80039000	39001	Overlapping gene(s)	Ancestral	0	0		None
Mouse 78	chr8:109603000-109621000	18001	Overlapping gene(s)	Ancestral	0	0		None
Mouse 80	chr5:129378000-129393000	15001	Overlapping gene(s)	Ancestral	1	0	Rat 77	None
Mouse 83	chr10:60946000-60952000	6001	Overlapping gene(s)	Ancestral	0	0		None
Mouse 88	chr6:92248000-92270000	22001	Overlapping gene(s)	Ancestral	0	0		None

\*All coordinates are given according to the UCSC Genome Browser (mouse build mm7, rat build rn3).