- **Suppl. Table 1:** *Polymorphic microsatellite markers and SNPs for the genome-wide*
- 368 scans of the (NZOxB6)F2 population.

Marker	Chr.	Pos. (Mbp)
rs3664960	1	11.9
rs3725641	1	28.8
rs4222284	1	39.1
rs3716368	1	49.5
rs3720019	1	58.5
rs3672814	1	77.2
rs3664662	1	106.4
rs3691057	1	125.3
rs3666525	1	148.3
D1Mit143	1	165.4
D1Mit36	1	171.1
rs3678478	1	177.6
D1Mit542	1	183.3
D1Mit223	1	190.5
rs3715125	1	193.6
rs3677975	2	20.2
rs3710255	2	39.6
rs3022884	2	54.4
rs3699089	2	75.9
rs4223268	2	93.3
rs3090608	2	118.0
rs3022911	2	143.8
rs3693259	2	160.8
rs3022949	3	14.6
rs3676674	3	63.4
rs3701617	3	82.2
rs3712218	3	109.6
rs4221957	3	129.5

rs3674066	3	149.3
D4Mit286	4	43.2
rs3698283	4	43.2
rs4224587	4	89.0
D4Mit175	4	100.1
D4Mit203	4	129.2
D4Mit233	4	144.8
D5Mit72	5	21.7
rs3708121	5	28.0
D5Mit77	5	38.9
D5Mit254	5	55.6
D5Mit290	5	64.8
rs3690045	5	89.7
D5Mit259	5	89.7
D5Mit161	5	127.4
D5Mit223	5	147.7
rs3023064	6	17.7
rs3699842	6	32.8
rs3699842 rs3717270	6 6	32.8 55.7
rs3699842 rs3717270 rs3686308	6 6 6	32.8 55.7 76.2
rs3699842 rs3717270 rs3686308 rs3667765	6 6 6 6	32.8 55.7 76.2 94.3
rs3699842 rs3717270 rs3686308 rs3667765 rs3711196	6 6 6 6 6	32.8 55.7 76.2 94.3 114.2
rs3699842 rs3717270 rs3686308 rs3667765 rs3711196 rs3684061	6 6 6 6 6 6	32.8 55.7 76.2 94.3 114.2 135.6
rs3699842 rs3717270 rs3686308 rs3667765 rs3711196 rs3684061 rs3655750	6 6 6 6 6 6 7	32.8 55.7 76.2 94.3 114.2 135.6 20.5
rs3699842 rs3717270 rs3686308 rs3667765 rs3711196 rs3684061 rs3655750 rs3720603	6 6 6 6 6 6 7 7 7	32.8 55.7 76.2 94.3 114.2 135.6 20.5 58.7
rs3699842 rs3717270 rs3686308 rs3667765 rs3711196 rs3684061 rs3655750 rs3720603 rs3710266	6 6 6 6 6 7 7 7 7	32.8 55.7 76.2 94.3 114.2 135.6 20.5 58.7 75.7
rs3699842 rs3717270 rs3686308 rs3667765 rs3711196 rs3684061 rs3655750 rs3720603 rs3710266 rs3714986	6 6 6 6 6 7 7 7 7 7 7	32.8 55.7 76.2 94.3 114.2 135.6 20.5 58.7 75.7 94.5
rs3699842 rs3717270 rs3686308 rs3667765 rs3711196 rs3684061 rs3655750 rs3720603 rs3710266 rs3714986 rs3692423	6 6 6 6 6 7 7 7 7 7 7 7 7	32.8 55.7 76.2 94.3 114.2 135.6 20.5 58.7 75.7 94.5 111.7
rs3699842 rs3717270 rs3686308 rs3667765 rs3711196 rs3684061 rs3655750 rs3720603 rs3710266 rs3714986 rs3692423 rs3697227	6 6 6 6 6 7 7 7 7 7 7 7 7 7 7 7 7	32.8 55.7 76.2 94.3 114.2 135.6 20.5 58.7 75.7 94.5 111.7 134.8
rs3699842 rs3717270 rs3686308 rs3667765 rs3711196 rs3684061 rs3655750 rs3720603 rs3710266 rs3714986 rs3692423 rs3697227 rs3686775	6 6 6 6 6 7 7 7 7 7 8	32.8 55.7 76.2 94.3 114.2 135.6 20.5 58.7 75.7 94.5 111.7 134.8 16.8
rs3699842 rs3717270 rs3686308 rs3667765 rs3711196 rs3684061 rs3655750 rs3720603 rs3710266 rs3714986 rs3692423 rs3697227 rs3686775 rs3726395	6 6 6 6 6 7 7 7 7 7 8 8	32.8 55.7 76.2 94.3 114.2 135.6 20.5 58.7 75.7 94.5 111.7 134.8 16.8 36.2

rs3696502	8	78.2
rs3710112	8	100.8
rs4227443	8	126.4
rs3663821	9	17.6
rs3707146	9	36.8
rs3666398	9	56.4
rs3685573	9	76.1
rs3692530	9	98.2
rs3663269	10	10.0
rs3679593	10	26.8
rs3696307	10	53.5
rs3717445	10	82.5
rs3716716	10	102.5
rs3151132	10	118.0
rs3703198	11	14.9
rs3723833	11	33.0
rs3088940	11	56.3
rs3691128	11	74.5
rs3688569	11	88.3
rs3705163	11	106.8
rs3709592	12	15.1
rs3665526	12	41.1
rs3706319	12	59.1
rs3655558	12	75.8
rs3711162	12	90.4
rs3023940	12	111.2
rs3681143	13	11.9
rs3723893	13	34.3
rs3023382	13	44.5
rs3714056	13	69.0
rs3666540	13	87.8
rs3686453	13	109.2

rs3660288	14	21.2
rs3696080	14	46.2
rs3700249	14	66.8
rs3676913	14	88.5
rs3686670	14	102.3
rs4137670	15	4.1
rs3690031	15	22.1
rs3090057	15	41.6
rs3702158	15	57.0
rs4230816	15	75.0
rs3707104	15	92.1
rs4155455	16	6.6
rs4165467	16	25.4
rs4180179	16	45.0
rs4197785	16	67.6
rs4216475	16	89.5
rs3660203	17	7.3
rs4137889	17	25.3
rs3677240	17	44.3
rs3718630	17	66.8
rs3669120	17	86.6
rs4231742	18	11.1
rs3666799	18	32.0
rs3706369	18	52.7
rs3675825	18	70.9
rs3715760	18	87.6
rs3691881	19	18.7
rs3705022	19	36.5
rs3720557	19	53.1

- 370 **Suppl. Table 2:** *Tresholds of suggestive (p<0.63) and significant linkage (p<0.05 and*
- 371 p<0.01) in (NZOxB6)F2 genome-wide scans determined by 1,000 permutations (Fig.
- 372 1 and Table 2).

	BW	BF	LM	BG	BL	BMI	Chol	TG
p<0.63	2.1	2.0	2.1	2.0	2.1	2.1	2.1	2.1
p<0.05	3.4	3.5	3.4	3.4	3.4	3.5	3.4	3.4
p<0.01	4.1	4.1	4.2	4.2	4.1	4.3	4.3	4.1

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374 Suppl. Table 3: Microsatellite markers and SNPs used for genotyping of the

founders for the congenic lines B6.NZO-Nob3.91 (Supplementary Fig. S2 and S3)

Marker	Chr.	Pos. [Mbp]
D1Mit231	1	20.9
D1Mit232	1	40.3
D1Mit303	1	63.0
D1Mit49	1	89.1
D1Mit468	1	105.9
D1Mit471	1	124.1
D1Mit102	1	149.1
D1Mit36	1	171.1
D1Mit209	1	193.3
D2Mit312	2	3.2
D2Mit362	2	18.9
D2Mit297	2	42.5
D2Mit182	2	68.7
D2Mit272	2	90.4
D2Mit274	2	114.3
D2Mit136	2	136.2
rs8273702	2	158.0
D2Mit310	2	162.0
D2Mit266	2	181.6
D3Mit264	3	8.7
D3Mit151	3	31.1
D3Mit25	3	56.6
D3Mit230	3	82.4
D3Mit142	3	118.1
D3Mit84	3	143.4
D4Mit149	4	3.6
D4Mit135	4	19.8

376 and B6.NZO-Nob3.38 (Fig.3).

D4Mit107	4	37.1
D4Mit217	4	59.8
D4Mit114	4	79.6
D4Mit303	4	97.9
D4Mit57	4	117.8
D4Mit233	4	144.8
D5Mit72	5	21.7
D5Mit77	5	38.9
D5Mit254	5	55.6
D5Mit58	5	73.7
D5Mit259	5	89.7
D5Mit239	5	107.8
D5Mit161	5	127.4
D5Mit380	5	141.6
D6Mit86	6	4.4
D6Mit116	6	25.1
D6Mit349	6	46.1
D6Mit123	6	69.7
D6Mit230	6	98.5
D6Mit150	6	116.1
D6Mit291	6	137.4
D7Mit21	7	3.3
D7Mit77	7	28.4
D7Mit145	7	58.7
D7Mit250	7	86.5
D7Mit138	7	108.5
D7Mit238	7	126.2
D7Mit361	7	144.6
D8Mit155	8	5.0
D8Mit289	8	29.9
D8Mit100	8	59.1
D8Mit179	8	73.5

D8Mit268	8	90.8
D8Mit183	8	103.6
D8Mit13	8	126.3
D9Mit64	9	28.4
D9Mit97	9	50.5
D9Mit107	9	73.3
D9Mit198	9	91.2
D9Mit179	9	112.1
D10Mit123	10	10.0
rs13480579	10	35.9
D10Mit31	10	67.7
D10Mit117	10	87.0
D10Mit233	10	113.8
D11Mit270	11	44.6
D11Mit131	11	56.0
D11Mit242	11	63.2
D11Mit212	11	88.7
D11Mit12	11	113.0
D12Mit11	12	19.8
D12Mit109	12	43.1
D12Mit36	12	61.8
D12Mit158	12	83.7
D12Mit28	12	106.6
D13Mit158	13	4.9
rs13481734	13	27.1
D13Mit139	13	51.9
D13Mit159	13	93.0
D13Mit31	13	115.0
D14Mit11	14	12.9
D14Mit44	14	29.1
D14Mit233	14	52.8
D14Mit193	14	71.9

D14Mit7	14	90.8
D15Mit179	15	13.4
D15Mit85	15	40.1
D15Mit167	15	59.8
D15Mit261	15	80.1
D15Mit97	15	100.6
rs4156937	16	7.1
D16Mit171	16	56.3
D16Mit77	16	60.9
D16Mit71	16	97.1
D17Mit164	17	3.9
D17Mit173	17	26.4
D17Mit177	17	48.7
D17Mit185	17	68.8
D17Mit123	17	93.6
D18Mit221	18	10.0
rs6167189	18	25.0
D18Mit177	18	41.1
D18Mit152	18	62.1
D18Mit4	18	84.3
rs13483542	19	16.2
D19Mit65	19	39.0
D19Mit71	19	59.7