

Addendum 1: Pedigrees used in the study

The following table shows the laboratory numbers which were assigned to the DNA samples as arranged in the dilution plates. Spaces in the laboratory number column indicate that DNA could not be obtained for these animals. The ID numbers denote the herd prefix from which the corresponding animals originate. Each animal has a sire and a dam and these columns indicate family relationships. The polled phenotype is indicated by P, Scurs by S and horns by H while a and x are animals of unknown status. Female animals are indicated by a 0 and male by 1.

LabNumber	IDAnimal	TypeAnimal	SexAnimal	LabNumberSire	IDSire	TypeSire	LabNumberDam	IDDam	TypeDam
14143	DFP97015	H	0						
14268	JPL92071	H	0			x			x
14437	JPL98028	H	1			x			x
14439	MCU90004	H	0			x			x
14288	MCU91015	H	0			x			x
14290	MCU91030	H	0			x			x
14411	MCU96080	P	0			x			x
14295	MCU96081	P	0			x			x
14296	MCU96082	P	0			x			x
14317	MCU96083	P	0			x			x
14410	MCU96086	P	0			x			x
14318	MCU96087	P	0			x			x
14412	MCU96088	P	0			x			x
14123	MCU96091	H	0			x			x
14125	MCU96092	P	0			x			x
14117	MCU96093	P	0			x			x
14108	MCU96095	P	0			x			x
14259	NFS98358	H	0	AG93042	H		14240	NFS95079	P
14327	MCU00102	P	0	AG94016	H		14326	CEG97070	P
14175	JPL99161	H	1	AG94255	H		14173	HOTE184	H
14089	MCU00036	P	1	AG97324	P		14264	JPL94083	P
14309	MCU00038	H	1	AG97324	P		14308	MCU97032	P
14136	MCU00042	H	0	AG97324	P		14135	CEG96004	P
14151	MCU00047	P	0	AG97324	P		14150	MCU96021	P
14153	MCU00048	P	0	AG97324	P		14152	TWK92386	P
14399	MCU00061	H	0	AG97324	P		14378	MCU98010	P
14155	MCU00064	P	0	AG97324	P		14154	MCU96012	H
14157	MCU00067	P	0	AG97324	P		14156	MCU97022	P
14111	MCU00088	P	0	AG97324	P		14110	MCU98012	P

LabNumber	IDAnimal	TypeAnimal	SexAnimal	LabNumberSire	IDSire	TypeSire	LabNumberDam	IDDam	TypeDam
14154	MCU96012	H	0		AMF91140	H		MCU91018	H
14408	NFS91175	H	0		AMFE469	H		NFSL087	H
14158	JPL90049	P	0		BGD038	H		LAS124	P
14152	TWK92386	P	0		BGK053	a		TWKK7028	a
14102	TWK92192	P	0		BH290	a		TWK203A	H
14099	TWKN057	P	0		BH290	a		BB024	H
14131	CEG93067	P	0		CEG90103	H	14120	CEG90132	P
14133	MCU98024	H	0		CEG93055	H	14131	CEG93067	P
14122	MCU98062	P	1		CEG93070	H	14120	CEG90132	P
14135	CEG96004	P	0		CEG93103	H	14131	CEG93067	P
14326	CEG97070	P	0		CEG94003	H		CEGN080	P
14430	DFP97180	P	1		DFP91070	P		DFP91030	S
14080	JPL99036	P	1	14055	DFP92086	P	14079	JPL91026	H
14061	JPL99042	P	0	14055	DFP92086	P		JPLH036	H
14063	JPL99043	P	0	14055	DFP92086	P	14062	JPL93005	H
14065	JPL99044	P	0	14055	DFP92086	P	14064	JPL91004	H
14067	JPL99045	P	0	14055	DFP92086	P	14066	JPL95039	S
14139	JPL99046	P	0	14055	DFP92086	P	14066	JPL95039	S
14069	JPL99047	H	0	14055	DFP92086	P	14068	JPL95041	H
14420	JPL99064	H	0	14055	DFP92086	P		JPLE027	H
14072	JPL99071	H	0	14055	DFP92086	P		JPLL036	H
14078	JPL99155	H	1	14055	DFP92086	P	14077	JPL92016	S
14421	JPL99162	P	0	14055	DFP92086	P	14075	JPL92039	P
14074	JPL99167	S	1	14055	DFP92086	P	14073	JPL95071	P
14082	MCU00001	H	0	14055	DFP92086	P	14081	MCU97006	P
14084	MCU00003	P	1	14055	DFP92086	P	14083	MCU97021	P
14086	MCU00004	P	1	14055	DFP92086	P		MCU97040	H
14085	MCU00006	P	1	14055	DFP92086	P		MCU97008	H
14098	MCU00010	P	0	14055	DFP92086	P	14097	MCU97010	P
14094	MCU00011	P	0	14055	DFP92086	P	14093	MCU97013	P
14096	MCU00013	P	1	14055	DFP92086	P	14095	MCU97030	P
14100	MCU00016	P	1	14055	DFP92086	P	14099	TWKN057	P
14087	MCU00017	P	0	14055	DFP92086	P		MCU95069	H
14103	MCU00021	P	1	14055	DFP92086	P	14102	TWK92192	P
14141	MCU00024	P	0	14055	DFP92086	P	14140	TWK94263	P
14138	MCU00025	P	1	14055	DFP92086	P	14137	TWK93060	P
14105	MCU00028	P	1	14055	DFP92086	P	14104	MCU97017	P
14107	MCU00032	P	0	14055	DFP92086	P	14106	TWK92433	P

LabNumber	IDAnimal	TypeAnimal	SexAnimal	LabNumberSire	IDSire	TypeSire	LabNumberDam	IDDam	TypeDam
14128	MCU00034	P	1	14055	DFP92086	P	14127	MCU97014	P
14109	MCU00062	P	0	14055	DFP92086	P	14108	MCU96095	P
14092	MCU00074	P	0	14055	DFP92086	P		MCU95058	H
14305	MCU00081	P	1	14055	DFP92086	P		MCU94095	H
14090	MCU00083	P	0	14055	DFP92086	P		MCUN002	H
14132	MCU00092	P	1	14055	DFP92086	P	14131	CEG93067	P
14113	MCU00101	P	0	14055	DFP92086	P	14112	JMP96018	P
14312	MCU00104	P	1	14055	DFP92086	P	14311	MCU94028	H
14306	MCU00105	P	1	14055	DFP92086	P	14300	TWK92368	P
14115	MCU00113	S	0	14055	DFP92086	P	14114	JPL94090	P
14307	MCU00114	H	1	14055	DFP92086	P	14265	JPL94089	P
14118	MCU00115	P	0	14055	DFP92086	P	14117	MCU96093	P
14121	MCU00116	P	0	14055	DFP92086	P	14120	CEG90132	P
14091	MCU00127	P	0	14055	DFP92086	P	14298	MCU96008	P
14124	MCU99032	P	0	14055	DFP92086	P	14123	MCU96091	H
14126	MCU99033	P	0	14055	DFP92086	P	14125	MCU96092	P
14130	NFS00023	P	0	14055	DFP92086	P	14129	NFS96182	P
14057	NFS00066	P	1	14055	DFP92086	P	14058	NFS96015	P
14060	NFS99233	P	0	14055	DFP92086	P	14059	NFS96353	P
14325	MCU00121	H	1	14239	DFP93019	P	14324	NFS96020	P
14241	NFS00018	H	0	14239	DFP93019	P	14240	NFS95079	P
14243	NFS00264	P	1	14239	DFP93019	P	14242	NFS95198	P
14245	NFS00303	P	0	14239	DFP93019	P	14244	NFS95208	P
14247	NFS00364	P	0	14239	DFP93019	P	14246	NFS96288	P
14055	DFP92086	P	1		DFPJ032	H		KDJK018	P
14239	DFP93019	P	1		DFPN065	a		DFP90059	H
14414	JPLK009	H	1		GBD245	H		JPLC039	H
14144	ROC93150	H	1		GOT90019	a		ROCN092	H
14315	MCU95055	P	0		GV90198	a		MCU90009	H
14182	DFP99105	P	0		GV95054	H	14180	DFPN038	P
14311	MCU94028	H	0		GVK105	H		MCUK044	H
14253	NFS94156	P	0		HJLN132	H	14145	NFSJ034	P
14248	NFS95049	H	1		HJLN132	H		NFSL262	?
14438	MCU98040	P	0		HJS95149	H	14417	CEGN080	P
14199	CTZ91012	S	0		HJVJ031	a		CTZE003	a
14197	CTZ93017	P	0		HJVJ031	a		CTZH019	H
14261	PJTK009	P	0		HOTB249	a		PJTD050	H

LabNumber	IDAnimal	TypeAnimal	SexAnimal	LabNumberSire	IDSire	TypeSire	LabNumberDam	IDDam	TypeDam
14417	CEGN080	P	0		HOTH243	a		PJB183	H
14180	DFPN038	P	0		HOTJ161	a		DFPD033	a
14173	HOTE184	H	0		HOTS028	H		TS038	H
14120	CEG90132	P	0		HOTX100	H		PJB183	H
14064	JPL91004	H	0		JDVD098	H		JPLK007	H
14079	JPL91026	H	0		JDVD098	H		JPLL012	H
14075	JPL92039	P	0		JDVD098	H	14261	PJTK009	P
14062	JPL93005	H	0		JDVK015	H		JPLH038	H
14070	JPL93022	H	0		JDVK015	H		JPLK026	H2
14162	JPL93032	P	1		JDVK015	H		JPLN043	P
14266	JPL94081	S	0	14263	JPL91050	P	14077	JPL92016	S
14185	JPL94082	S	0	14263	JPL91050	P		JPL92030	P
14264	JPL94083	P	0	14263	JPL91050	P		JPL92011	H
14265	JPL94089	P	0	14263	JPL91050	P		JPL92059	H
14114	JPL94090	P	0	14263	JPL91050	P	14206	JPL91071	S
14271	JPL95004	H	0	14263	JPL91050	P	14268	JPL92071	H
14066	JPL95039	S	0	14263	JPL91050	P		JPL92074	H
14269	JPL95043	S	0	14263	JPL91050	P		JPL92069	H
14178	JPL95080	S	0	14263	JPL91050	P		JPL92068	H
14208	JPL96011	P	0	14263	JPL91050	P	14415	JPLN014	S
14191	JPL96026	P	0	14263	JPL91050	P		JPL91080	H
14188	JPL95060	P	0		JPL92024	P	14328	JPL91127	P
14073	JPL95071	P	0		JPL92024	P	14206	JPL91071	S
14194	JPL96027	P	0		JPL92024	P		JPL92066	H
14282	JPL97015	H	0		JPL92024	P		JPL94068	H
14169	JPL97020	H	0		JPL92024	P		JPL94058	H
14163	JPL97022	H	0		JPL92024	P		JPL94078	H
14424	JPL97075	P	0		JPL92024	P		JPL94029	H
14112	JMP96018	P	0		JPL92-024	P		JPLL070	H
14198	CEF00500	P	0	14162	JPL93032	P	14197	CTZ93017	P
14202	CEF00508	P	1	14162	JPL93032	P	14201	CTZ92029	P
14203	CEF00509	P	0	14162	JPL93032	P	14201	CTZ92029	P
14200	CEF00511	P	1	14162	JPL93032	P	14199	CTZ91012	S
14164	JPL00001	P	0	14162	JPL93032	P	14163	JPL97022	H
14166	JPL00002	S	1	14162	JPL93032	P		JPL98084	P
14168	JPL00003	P	1	14162	JPL93032	P	14167	JPL96076	H
14170	JPL00021	S	1	14162	JPL93032	P	14169	JPL97020	H

LabNumber	IDAnimal	TypeAnimal	SexAnimal	LabNumberSire	IDSire	TypeSire	LabNumberDam	IDDam	TypeDam
14172	JPL00025	S	1	14162	JPL93032	P	14171	JPL97055	H
14432	JPL00031	P	0	14162	JPL93032	P		JPL97035	H
14174	JPL00086	P	1	14162	JPL93032	P	14173	HOTE184	H
14177	JPL00094	P	0	14162	JPL93032	P	14176	JPL98068	H
14179	JPL00100	P	0	14162	JPL93032	P	14178	JPL95080	S
14181	JPL00101	P	0	14162	JPL93032	P	14180	DFPN038	P
14423	JPL00103	P	1	14162	JPL93032	P	14183	JPL95077	P
14186	JPL00104	H	0	14162	JPL93032	P	14267	JPL94082	S
14187	JPL00107	S	0	14162	JPL93032	P	14077	JPL92016	S
14422	JPL00108	P	1	14162	JPL93032	P	14188	JPL95060	P
14190	JPL00109	H	0	14162	JPL93032	P	14075	JPL92039	P
14192	JPL00110	P	0	14162	JPL93032	P	14191	JPL96026	P
14193	JPL00111	P	0	14162	JPL93032	P	14073	JPL95071	P
14195	JPL00112	P	0	14162	JPL93032	P	14194	JPL96027	P
14205	JPL99026	P	0	14162	JPL93032	P	14204	CEF96037	H
14207	JPL99032	P	0	14162	JPL93032	P	14206	JPL91071	S
14209	JPL99041	P	0	14162	JPL93032	P	14208	JPL96011	P
14071	JPL99068	H	0	14162	JPL93032	P		JPL96016	H
14196	JPL99078	P	0	14162	JPL93032	P		JPL97026	H
14272	JPL97052	H	0	14270	JPL93050	H	14271	JPL95004	H
14273	JPL98054	H	0	14270	JPL93050	H	14066	JPL95039	S
14176	JPL98068	H	0	14270	JPL93050	H		JPL95079	H
14394	JPL00016	H	0	14413	JPL94066	H		JPL95009	H
14276	JPL00019	H	1	14413	JPL94066	H	14266	JPL94081	S
14275	JPL98035	P	0	14413	JPL94066	H	14073	JPL95071	P
14274	JPL98060	P	0	14413	JPL94066	H	14194	JPL96027	P
14426	JPL00087	H	0		JPL95064	H	14424	JPL97075	P
14287	MCU99042	P	0		JPL96054	P	14108	MCU96095	P
14286	MCU99044	P	0		JPL96054	P		MCUK034	H
14289	MCU99045	P	0		JPL96054	P	14288	MCU91015	H
14302	MCU99049	P	1		JPL96054	P		MCUK031	H
14291	MCU99052	P			JPL96054	P		MCU91030	P
14292	MCU99054	P	0		JPL96054	P	14417	CEGN080	P
14304	MCU99056	P	1		JPL96054	P		MCU95001	H
14293	MCU99062	P	0		JPL96054	P		MCU94096	H
14303	MCU99079	H	0		JPL96054	P		MCUK043	H
14294	MCU99085	P	0		JPL96054	P		MCU90014	H

LabNumber	IDAnimal	TypeAnimal	SexAnimal	LabNumberSire	IDSire	TypeSire	LabNumberDam	IDDam	TypeDam
14297	MCU99090	P	1		JPL96054	P	14114	JPL94090	P
14299	MCU99096	P	1		JPL96054	P	14298	MCU96008	P
14301	MCU99099	P	1		JPL96054	P	14300	TWK92368	P
14263	JPL91050	P	1		JPLL094	H	14261	PJTK009	P
14280	JPL98013	H	0		KAN90048	H	14415	JPLN014	S
14431	JPL99013	S	0		KAN90048	H		JPLN043	P
14427	JPL99082	H	0		KAN90048	H	14261	PJTK009	P
14429	JPL01006	H	0		LEL94060	P	14206	JPL91071	s
14262	JPL01007	P	0		LEL94060	P	14261	PJTK009	P
14106	TWK92433	P	0		LELN062	a		TWKN211	a
14140	TWK94263	P	0		LELN062	a		TWKL054	a
14270	JPL93050	H	1		LTS90102	H		JPLH036	H
14183	JPL95077	P	0		LTS90102	H	14158	JPL90049	P
14145	NFSJ034	P	0		MLJX105	H		NFS061	H
14214	NFSL243	?	0		MMJH021	a		MMJJ026	H
14137	TWK93060	P	0		MMJX206	a		TWKK7030	a
14436	MCU98049	P	0		MS	a	14412	MCU96088	P
14441	MCU98070	P	0		MS	a		MCU96094	P
14406	NFS94131	P	0		NFS90288	H		NFSL187	H
14413	JPL94066	H	1		NFS90303	H		JPL90047	H
14242	NFS95198	P	0		NFS90303	H	14258	NFS91025	P
14298	MCU96008	P	0		NFS91284	P		AGB144	H
14150	MCU96021	P	0		NFS91284	P		AGD232	H
14215	NFS95060	H	1		NFS91284	P	14214	NFSL243	?
14240	NFS95079	P	0		NFS91284	P	14419	NFSN367	?
14244	NFS95208	P	0		NFS91284	P		NFS90178	H
14416	NFS95237	P	0		NFS91284	P	14409	NFSL022	P
14251	NFS95239	H	0		NFS91284	P		NFSL085	H
14428	NFS95282	P	0		NFS91284	P		NFS90096	H
14401	NFS95286	?	0		NFS91284	P	14400	NFS91010	P
14058	NFS96015	P	0		NFS91284	P		NFS92357	H
14324	NFS96020	P	0		NFS91284	P		NFS93053	H
14404	NFS96024	P	0		NFS91284	P		NFS93151	H
14405	NFS96070	P	0		NFS91284	P		NFS92318	H
14147	NFS96267	H	0		NFS91284	P	14418	NFS92279	?
14285	NFS96276	H	1		NFS91284	P		NFS91159	P
14246	NFS96288	P	0		NFS91284	P	14260	NFS91135	P
14249	NFS96301	P	0		NFS91284	P		MMJD078	H

LabNumber	IDAnimal	TypeAnimal	SexAnimal	LabNumberSire	IDSire	TypeSire	LabNumberDam	IDDam	TypeDam
14059	NFS96353	P	0		NFS91284	P		NFS92263	H
14256	NFS95143	P	0		NFS92058	H	14398	NFS92301	P
14393	NFS00260	H	1	14395	NFS92137	H	14401	NFS95286	?
14252	NFS96350	H	1	14395	NFS92137	H		AEMD057	?
14382	NFS98025	P	0		NFS94157	H		NFS92175	P
14234	NFS98030	H	0		NFS94157	H		NFS91093	H
14377	NFS98129	H	0		NFS94157	H		NFS94048	H
14230	NFS98131	H	0		NFS94157	H		NFS94245	H
14231	NFS98164	H	0		NFS94157	H		ASE93053	H
14374	NFS98175	H	0		NFS94157	H		NFS94260	?
14235	NFS98246	H	0		NFS94157	H		NFS93184	H
14233	NFS98253	H	0		NFS94157	H		NFS95273	P
14372	NFS98264	P	0		NFS94157	H		NFS96137	H
14211	NFS98296	P	0		NFS94157	H		NFSH115	H
14373	NFS98324	H	0		NFS94157	H		NFS93269	H
14232	NFS98334	H	1		NFS94157	H		NFS92351	H
14228	NFS98344	H	0		NFS94157	H		NFS92041	H
14229	NFS98367	H	0		NFS94157	H		NFS95177	H
14226	NFS98376	H	0		NFS94157	H		NFS95107	?
14236	NFS98381	H	0		NFS94157	H		NFS94030	?
14212	NFS98382	?	0		NFS94157	H		NFSH017	?
14376	NFS98388	H	0		NFS94157	H		NFS94350	H
14375	NFS98402	H	0		NFS94157	H		NFS93277	H
14380	NFS99246	H	0		NFS94157	H		NFS95074	H
14213	NFS99288	P	0		NFS94157	H		NFS93220	H
14383	NFS99289	H	0		NFS94157	H		NFS92195	H
14369	NFS99335	H	1		NFS94157	H		NFS91127	H
14381	NFS99340	H	0		NFS94157	H		NFS94268	H
14371	NFS99347	H	0		NFS94157	H		NFS93382	H
14210	NFS99356	P	0		NFS94157	H		NFSH115	H
14370	NFS99380	H	1		NFS94157	H		NFS93318	H
14367	NFS99392	H	1		NFS94157	H		NFS91102	P
14238	NFS99414	H	0		NFS94157	H		NFS93383	H
14425	JPL00014	H	1		NFS94234	H		JPLK007	H
14159	JPL98088	P	1		NFS94234	H	14158	JPL90049	P
14250	NFS00341	H	1	14248	NFS95049	H	14249	NFS96301	P
14390	NFS00057	H	0	14215	NFS95060	H		NFS97285	H
14220	NFS00158	H	1	14215	NFS95060	H		NFS97228	H
14221	NFS00177	H	1	14215	NFS95060	H	14418	NFS92279	?
14225	NFS00188	H	0	14215	NFS95060	H		NFS91011	?
14224	NFS00200	H	0	14215	NFS95060	H		NFS94350	H

LabNumber	IDAnimal	TypeAnimal	SexAnimal	LabNumberSire	IDSire	TypeSire	LabNumberDam	IDDam	TypeDam
14219	NFS00221	H	0	14215	NFS95060	H		NFS93378	H
14223	NFS00224	H	1	14215	NFS95060	H		NFS95332	H
14216	NFS00232	H	1	14215	NFS95060	H		NFS96409	H
14222	NFS00283	H	0	14215	NFS95060	H		NFS97042	H
14218	NFS00348	H	1	14215	NFS95060	H		NFS96417	P
14391	NFS00397	H	0	14215	NFS95060	H		NFS93198	H
14388	NFS99247	H	0	14215	NFS95060	H		NFS91349	H
14379	NFS99258	H	1	14215	NFS95060	H		NFS96449	H
14387	NFS99282	H	0	14215	NFS95060	H		NFS96044	H
14385	NFS99336	H	0	14215	NFS95060	H		NFS96413	H
14227	NFS99408	H	0	14215	NFS95060	H		KDJJ055	H
14283	JPL00079	H	0	14285	NFS96276	H	14282	JPL97015	H
14284	JPL00080	H	0	14285	NFS96276	H	14282	JPL97015	H
14277	JPL00065	H	0		NFS96344	H	14208	JPL96011	P
14279	JPL00076	H	0		NFS96344	H		JPL96052	H
14278	JPL00077	H	0		NFS96344	H	14066	JPL95039	S
14217	NFS00285	H	1	14252	NFS96350	H	14251	NFS95239	H
14402	NFS00236	H	0		NFS98039	H		NFS98096	H
14403	NFS00275	H	1		NFS98047	H		NFSK094	?
14409	NFSL022	P	0		NFSD003	S		AEMH079	H
14260	NFS91135	P	0		NFSJ065	?		NFSJ077	H
14328	JPL91127	P	0		NFSJ095	S		JPLD012	H
14077	JPL92016	S	0		NFSJ095	S		JPLH038	H
14415	JPLN014	S	0		NFSJ095	S		JPLC025	H
14397	NFS92138	H	1		NFSJ138	H		NFSH054	H
14418	NFS92279	?	0		NFSJ141	H		AEMD057	?
14204	CEF96037	H	0		NFSK088	H		CEFD018	H
14161	NFS90202	H	0		NFSK088	H		MLJX070	H
14400	NFS91010	P	0		NFSK088	H		AEMB066	?
14398	NFS92301	P	0		NFSK096	H		AEMY004	H
14258	NFS91025	P	0		NFSL145	H		NFSK158	H
14395	NFS92137	H	1		NFSL145	H		AEMD065	H
14068	JPL95041	h	0		NFSN042	H		JPL91075	H
14167	JPL96076	H	0		NFSN042	H		JPL92052	P
14165	JPL96084	P	0		NFSN042	H	14206	JPL91071	S
14254	NFS00319	P	0		NFSN174	H	14253	NFS94156	P
14257	NFS00365	P	0		NFSN174	H	14256	NFS95143	P

LabNumber	IDAnimal	TypeAnimal	SexAnimal	LabNumberSire	IDSire	TypeSire	LabNumberDam	IDDam	TypeDam
14384	NFS99358	P			NFSN174	H		NFS95-208	P
14435	MCU98022	P	0		PHR94108	H		JMP96022	P
14440	MCU98079	P	0		PHR94278	H		MCU002	P
14201	CTZ92029	P	0		PHRK090	H		CTZK053	a
14160	NFS00167	H	0	14144	ROC93150	H	14147	NFS96267	H
14129	NFS96182	P	0	14144	ROC93150	H	14145	NFSJ034	P
14206	JPL91071	S	0		SASE078	H		JPLJ312	H
14255	NFS96278	P	0		TEW93013	H	14253	NFS94156	P
14419	NFSN367	?	0		TUKY029	H		AEMJ003	H
14354	MCU00009	P	1		TWK93268	P		MCU96089	P
14088	MCU00019	S	0		TWK93268	P		BENL086	H
14357	MCU00020	S	1		TWK93268	P		MCU97001	H
14322	MCU00026	P	1		TWK93268	P	14321	MCU97023	P
14363	MCU00030	P	1		TWK93268	P		BEN91087	H
14314	MCU00041	P	1		TWK93268	P		MCU91036	H
14323	MCU00044	S	0		TWK93268	P	14125	MCU96092	P
14319	MCU00057	P	1		TWK93268	P	14318	MCU96087	P
14313	MCU00063	P	1		TWK93268	P	14290	MCU91030	H
14134	MCU00065	P	1		TWK93268	P	14123	MCU96091	H
14316	MCU00087	S	1		TWK93268	P	14315	MCU95055	P
14330	MCU00095	P	0		TWK93268	P	14161	NFS90202	H
14329	MCU00100	P	0		TWK93268	P	14328	JPL91127	P
14320	MCU00117	P	1		TWK93268	P		NFS92175	P
14081	MCU97006	P	0		TWK93268	P		MCU94093	H
14097	MCU97010	P	0		TWK93268	P	14311	MCU94028	H
14093	MCU97013	P	0		TWK93268	P	14288	MCU91015	H
14127	MCU97014	P	0		TWK93268	P		MCU92005	H
14104	MCU97017	P	0		TWK93268	P		MCUK034	H
14083	MCU97021	P	0		TWK93268	P		MCU92055	H
14156	MCU97022	P	0		TWK93268	P		MCU90009	H
14321	MCU97023	P	0		TWK93268	P		MCUK033	a
14095	MCU97030	P	0		TWK93268	P		MCU91018	H
14308	MCU97032	P	0		TWK93268	P	14290	MCU91030	H
14378	MCU98010	P	0		TWK93268	P		MCU95069	H
14110	MCU98012	P	0		TWK93268	P		MCU95068	H
14331	MCU98016	P	0		TWK93268	P		MCU94097	H
14344	MCU98023	H	0		TWK93268	P	14315	MCU95055	P
14332	MCU98033	P	0		TWK93268	P		MCU91036	H

LabNumber	IDAnimal	TypeAnimal	SexAnimal	LabNumberSire	IDSire	TypeSire	LabNumberDam	IDDam	TypeDam
14333	MCU98041	P	0		TWK93268	P		MCUK044	H
14334	MCU98044	P	0		TWK93268	P		MCUK034	H
14335	MCU98045	P	0		TWK93268	P		MCU93019	P
14336	MCU98047	P	0		TWK93268	P		MCU96004	H
14337	MCU98056	P	0		TWK93268	P		MCU94095	H
14338	MCU98057	P	0		TWK93268	P		BEN91137	H
14339	MCU98065	P	0		TWK93268	P		BENN129	H
14340	MCU98074	P	0		TWK93268	P		MCUK023	H
14346	MCU99008	P	1		TWK93268	P	14150	MCU96021	P
14342	MCU99030	P	1		TWK93268	P	14264	JPL94083	P
14343	MCU99035	P	1		TWK93268	P	14410	MCU96086	P
14362	MCU99038	P	0		TWK93268	P		NFS91056	P
14347	MCU99039	H	1		TWK93268	P	14411	MCU96080	P
14348	MCU99046	P	0		TWK93268	P	14131	CEG93067	P
14434	MCU99048	P	1		TWK93268	P		MCUK044	a
14365	MCU99050	P	0		TWK93268	P		MCU92005	H
14351	MCU99055	P	1		TWK93268	P		MCUK023	H
14350	MCU99059	P	1		TWK93268	P		MCU94090	H
14349	MCU99061	P	0		TWK93268	P	14328	JPL91127	P
14360	MCU99064	P	0		TWK93268	P		MCU94091	H
14345	MCU99068	P	0		TWK93268	P	14265	JPL94089	P
14361	MCU99069	P	0		TWK93268	P	14265	JPL94089	P
14364	MCU99072	P	0		TWK93268	P		BEN92123	H
14358	MCU99073	P	0		TWK93268	P	14428	NFS95282	P
14356	MCU99074	P	1		TWK93268	P		MCU94094	H
14355	MCU99078	P	1		TWK93268	P	14408	NFS91175	H
14366	MCU99088	P	0		TWK93268	P		MCU96085	P
14353	MCU99089	P	1		TWK93268	P		BENN129	H
14359	MCU99097	P	0		TWK93268	P		HFS92138	P
14433	MCU99001	P	0		TWK95156	H		TWK94034	P
14341	MCU99002	P	1		TWK95156	H	14300	TWK92368	P
14142	MCU99015	H	1		TWK95156	H	14140	TWK94263	P
14101	MCU99018	P	1		TWK95156	H	14099	TWKN057	P
14300	TWK92368	P	0		TWKL020	H		TWKD051	a
14171	JPL97055	H	0		VVN349	H		JPLJ061	a
14281	MCU96089	P	0		X			X	

Addendum 2: Dilution plate design

The dilution plates are numbered from 1 to 5. They DNA samples were arranged in such a way that families lie close to each other. This was done in order to simplify the identification of genotypes in further analysis steps. Each plate contained 96 samples.

PLATE1

14055	14056	14057	14058	14059	14060	14061	14062	14063	14064	14065	14066
14067	14068	14069	14070	14071	14072	14073	14074	14075	14076	14077	14078
14079	14080	14081	14082	14083	14084	14085	14086	14087	14088	14089	14090
14091	14092	14093	14094	14095	14096	14097	14098	14099	14100	14101	14102
14103	14104	14105	14106	14107	14108	14109	14110	14111	14112	14113	14114
14115	SPACE	14117	14118	SPACE	14120	14121	14122	14123	14124	14125	14126
14127	14128	14129	14130	14131	14132	14133	14122	14134	14135	14136	14137
14138	SPACE	14139	14140	14141	14142	SPACE	14143	14144	14145	14129	14147

PLATE2

14150	14151	14152	14153	14154	14155	14156	14157	14158	14159	14160	14161
14162	14163	14164	14165	14166	14167	14168	14169	14170	14171	14172	SPACE
14173	14174	14175	14176	14177	14178	14179	14180	14181	14182	14183	14184
14266	14186	SPACE	14187	14188	14189	SPACE	14190	14191	14192	SPACE	14193
14194	14195	14196	14197	14198	14199	14200	SPACE	SPACE	14201	14202	14203
14204	14205	14206	14207	14208	14209	14210	14211	14212	14213	14214	14215
14216	14217	14218	14219	14220	14221	14222	14223	14224	14225	14226	14227
14228	14229	14230	14231	SPACE	14232	14233	14234	14235	14236	14237	14238

PLATE3

14239	14240	14241	14242	14243	14244	14245	14246	14247	14248	14249	14250
14251	14252	SPACE	14253	14254	14255	14256	14257	14258	SPACE	SPACE	14259
14260	14261	14262	14263	14264	14265	14266	14267	14268	14269	SPACE	SPACE
SPACE	SPACE	14270	14271	14272	SPACE	14273	SPACE	14274	SPACE	14275	14276
14277	14278	14279	14280	SPACE	14281	14282	14283	14284	14285	14378	14399
14286	SPACE	14287	14288	14289	14290	14291	SPACE	14292	SPACE	14293	14294
14295	SPACE	14296	SPACE	14297	14298	14299	14300	14301	14302	14303	14304
14305	14306	14307	14308	14309	SPACE	SPACE	SPACE	SPACE	14310	14311	14312

PLATE4

14290	14313	SPACE	14314	14315	14316	SPACE	14317	14318	14319	14320	14321
14322	SPACE	14323	SPACE	14324	14325	14326	14327	14328	14329	14161	14330
14331	14332	14333	14334	14335	14336	14337	14338	14339	14340	14341	14342
14343	14344	14345	14346	14347	SPACE	14348	SPACE	14349	14350	14351	14352
14353	14281	14354	SPACE	14355	14356	14357	14358	14359	14360	14361	14362
14363	14364	14365	14366	14367	14368	14369	14370	14371	14372	14373	14374
14375	14376	14377	14378	14379	14380	14381	14382	14383	14384	14385	14386
14387	14388	14389	14390	14391	14392	14393	14394	14395	14396	14397	14398

PLATE5

14400	14401	14402	14403	14404	14405	14406	14407	14408	14328	14409	SPACE
14410	14411	14412	14413	14414	14415	14416	SPACE	SPACE	14417	14418	14419
SPACE	14420	14421	SPACE	14422	14423	SPACE	14424	14425	14426	SPACE	14427
14428	14429	14430	14431	14432	14433	14434	14435	14436	14437	14438	14439