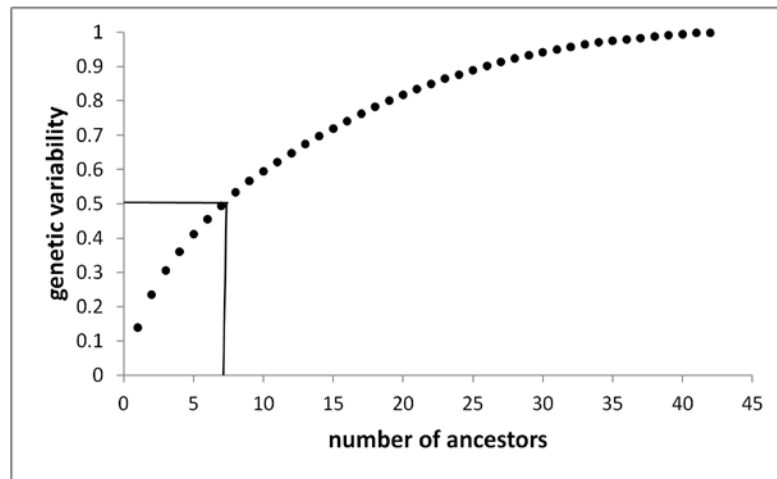


**Figure S1.** Pedigree completeness up to 4 generations back in Nero Lucano pig.



**Figure S2.** Effect of number of ancestors on genetic variability in Nero Lucano pig.

**Table S1.** distribution of SNPs per chromosome updated according to the Illumina PorcineSNP60 v2.0 Manifest File modified on 26/4/2019.

<b>chromosome</b>	<b>previous SNP number</b>	<b>updated SNP number</b>
0	7849	1091
1	6512	7183
2	3392	3767
3	2805	3263
4	3551	3902
5	2361	2740
6	3216	4122
7	3348	3610
8	2777	3178
9	3213	3528
10	1796	1954
11	1890	2151
12	1562	1803
13	4090	4604
14	3906	4267
15	2906	3303
16	1877	2086
17	1720	1916
18	1336	1487
X	1449	1426
Y	9	58
XY $\psi$ - autosome		126
total	61565	61565

**Table S2.** Distribution of SNPs per chromosome and MAF classes in Nero Lucano pig.

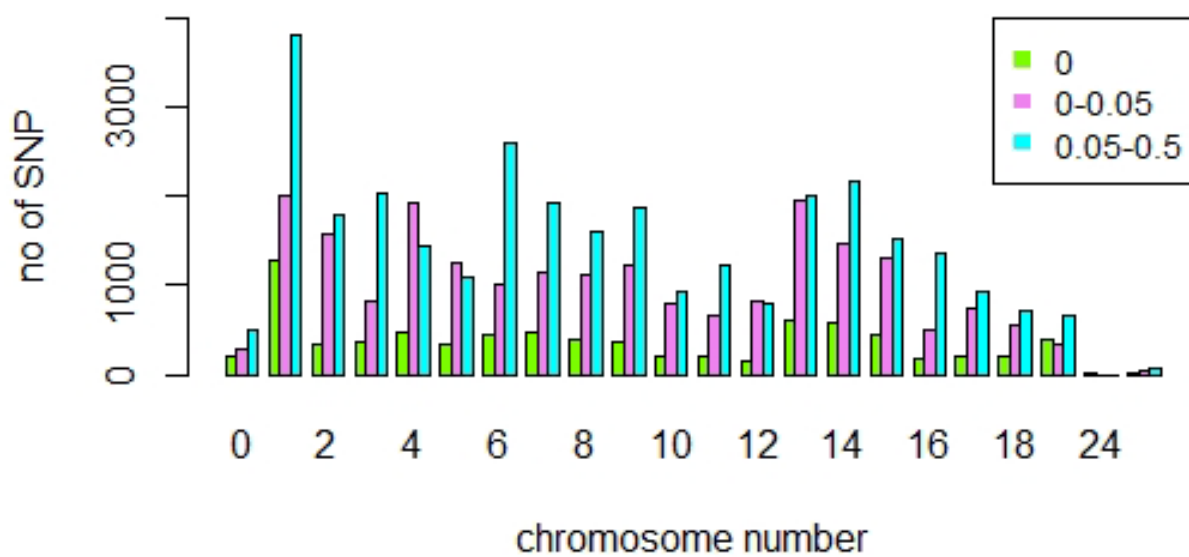
SSC	MAF			total
	0	0-0.05	0.05-0.5	
0	207	286	503	996
1	1292	2011	3810	7113
2	339	1582	1791	3712
3	378	812	2027	3217
4	486	1927	1451	3864
5	340	1268	1102	2710
6	460	1006	2607	4073
7	487	1138	1919	3544
8	401	1132	1619	3152
9	366	1231	1882	3479
10	203	800	930	1933
11	204	667	1242	2113
12	153	835	788	1776
13	611	1944	2003	4558
14	576	1474	2163	4213
15	434	1307	1513	3254
16	183	511	1364	2058
17	196	744	944	1884
18	196	555	719	1470
23	405	328	669	1402
24	17	0	0	17
25	10	41	71	122
<b>total</b>				60660

0= non-defined chromosome position

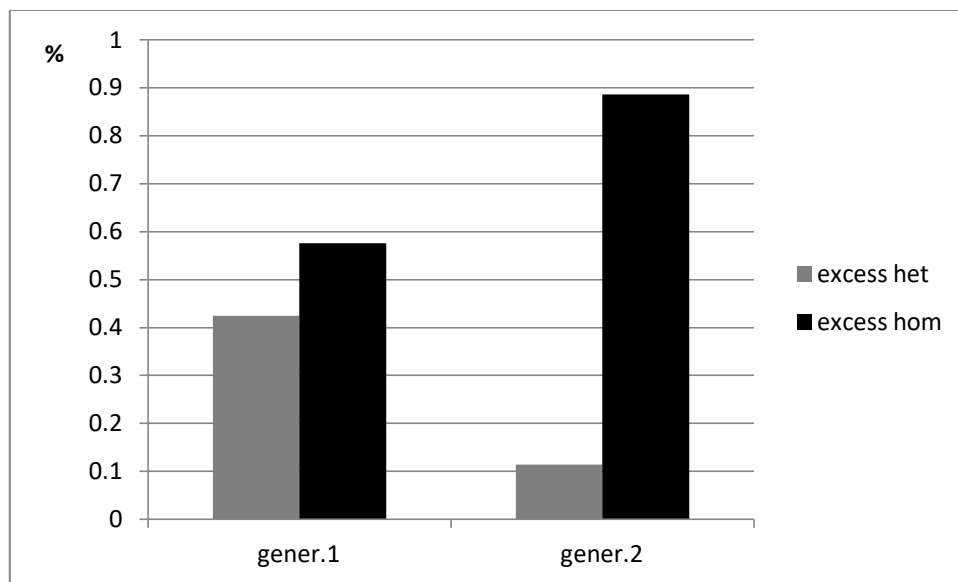
23=X chromosome

24=Y chromosome

25= XY @autosomal region



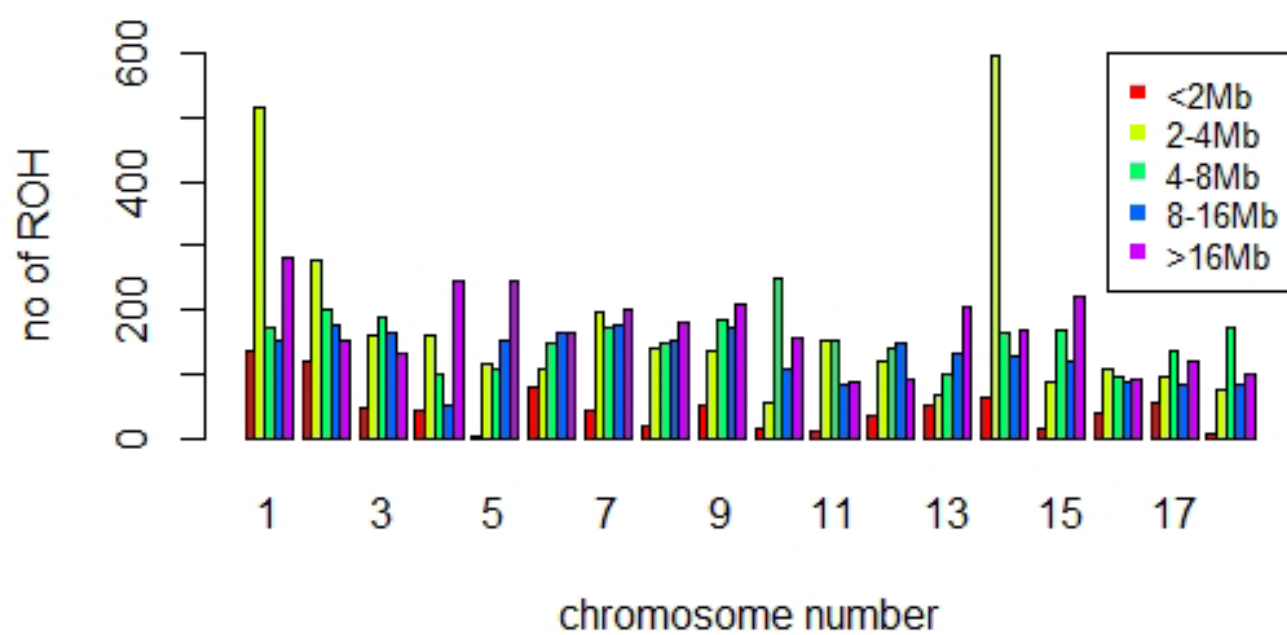
**Figure S3.** SNP distribution per chromosome and MAF classes in Nero Lucano pig. (0= non-defined chromosome position, 23=X chromosome, 24= Y chromosome, 25= XY  $\psi$ -autosomal region).



**Figure S4.** SNPs in Hardy-Weinberg disequilibrium due to excess of heterozygotes and homozygotes in generations 1 and 2 of the Nero Lucano pig pedigree.

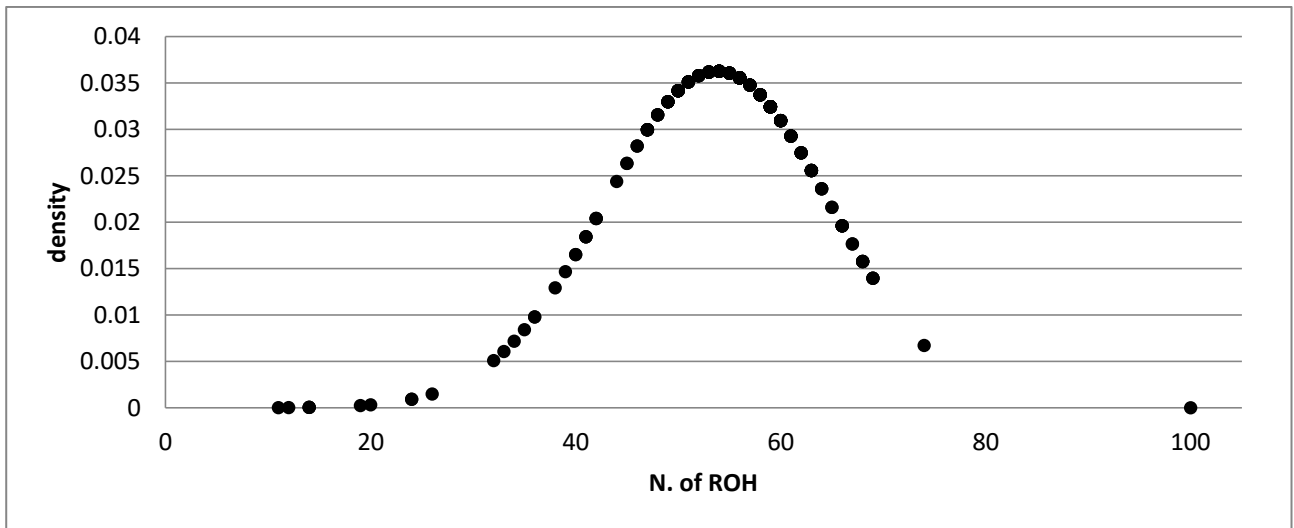
**Table S3.** Distribution of the ROH per chromosome and ROH classes in Nero Lucano pig.

SSC	ROH class					Totale N.	% coverage
	<2Mb	2-4Mb	4-8Mb	8-16Mb	>16Mb		
1	136	517	171	154	280	1258	29.41
2	118	279	202	175	154	928	36.38
3	48	162	189	163	132	694	24.69
4	41	159	98	52	246	596	51.2
5	3	114	106	152	244	619	49.67
6	79	106	149	163	165	662	28.01
7	44	197	171	178	199	789	42.7
8	19	138	146	153	180	636	36.39
9	49	135	184	172	209	749	40.17
10	16	54	249	107	158	584	45.77
11	10	154	150	84	89	487	27.95
12	35	121	138	149	93	536	39.1
13	50	69	99	130	204	552	45.18
14	61	595	163	129	170	1118	41.44
15	13	88	167	118	222	608	48.86
16	39	106	95	88	91	419	29.28
17	53	95	134	85	120	487	40.48
18	6	74	174	82	101	437	39.18
N./class	820	3163	2785	2334	3057	12159	38.16
%/class	6.74	26.01	22.91	19.2	25.14	1	



**Figure S5.** Distribution of the ROH per chromosome and length in Nero Lucano pig.





**Figure S6.** Distribution of the ROH in the Nero Lucano pig population.

**Table S4.** Distribution of the ROH present in more than 30% of the analyzed Nero Lucano pigs, longer than 500kb, and with at least 20 SNPs.

SSC	common ROH	the longer (kb)	the most represented (kb)
1	18	2908.297 (111)	756.477 (116)
2	17	2334.882 (75)	861.384 (195)
3	0	—	—
4	19	2676.525 (79)	1507.925 (205)
5	12	2790.301 (79)	2149.325 (210)
6	10	2901.328 (73)	1379.01 (105)
7	17	2810.644 (139)	1762.86 (149)
8	11	3894.132 (130)	773.528 (143)
9	10	1985.692 (155)	1290.151 (165)
10	6	1324.492 (99)	1059.501 (149)
11	3	1232.266 (110)	
12	4	1391.44 (72)	748.116 (125)
13	8	5555.072 (164)	2251.264 (166)
14	15	1872.548 (79)	1856.209 (214)
15	12	5749.139 (93)	2666.392 (201)
16	3	1030.413 (106)	
17	3	1033.309 (90)	765.889 (99)
18	3	1235.672 (101)	751.602 (197)

In parenthesis the number of pigs sharing the ROH

**Table S5.** Genes located in the most represented ROH per each chromosome of the Nero Lucano pig (NCBI Release 106, Chromosome Assembly Sscrofa 11.1). N=number of pigs sharing that ROH.

SSC	1	1	2	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
From bp	74,697,399	75,598,401	138,402,311	110,313,400	77,860,263	88,560,724	28,115,845	133,299,160	37,152,122	51,270,214	1,019,966	43,427,847	48,679,827	46,176,964	24,689,916	72,355,816	11,383,256	3,021,252
To bp	75,386,437	76,354,878	139,263,695	111,821,325	80,009,588	89,939,734	29,878,705	134,072,688	38,442,273	52,329,715	2,252,232	44,175,963	51,136,679	48,033,173	27,356,308	73,387,229	12,149,145	3,772,854
N	116	116	195	205	210	105	149	143	165	149	110	125	166	214	201	106	99	197
GENES	FOXO3 ARMC2 SESN1 CEP57L1	AK9 FIG4 GPR6 WASF1 CDC40 METTL24	TRPC7 SPOCK1	EPS8L3 GSTM3 AMPD2 GNAT2 GNAI3 AMIGO1 ATXN7L2 SYPL2 PSMA5 SORT1 MYBPHL PSRC1 CELSR2 SARS KIAA1324 TMEM167B TAF13 WDR47 CLCC1 GPSM2 AKNAD1 STXBP3 FNDC7 PRPF38B HENMT1 FAM102B SLC25A24	RPAP3 ENDOU RAPGEF3 SLC48A1 HDAC7 VDR TMEM106C COL2A1 TMEM234 SEN1 EIF3I RPS18 PFKM FAM167B ASB8 LCK HDAC1 CCDC184 ZNF641 MARCKSL1 LALBA FAM229A TAPBP KANS12 BSDC1 ZBTB22 APPL2 TSSK3 DAXX WASHC4 ZBTB8B KIFC1 ALDH1L2 ZBTB8A PHF1 SLC41A2 ZBTB8OS CUTA CHST11 RBBP4 SYNGAP1 ZBTB9 KIAA1522 BAK1 YARS ITPR3 S100PBP FNDC5 HPCA TMEM54 RNF19B AK2 AZIN2 TRIM62 ZNF362 A3GALT2 PHC2 ZSCAN20 CSMD2	KHDRBS1 PRIM2 ARHGAP24 WDFY3 CDS1 DDX10 ZC3H12C RDX FDX1 OTUD1 PTF1A IL17D XPO4 EV12A FAM19A1 KREMEN1 DBI SEMA5A POLB AK9 FIG4 GPR6 WASF1 CDC40 METTL24	PRIM2 RAB23 BAG2 ZNF451 BEND6 DST COL21A1 VPS52 RPS18 B3GALT4 WDR46 PFDN6 RGL2 TAPBP ZBTB22 DAXX KIFC1 PHF1 CUTA SYNGAP1 ZBTB9 BAK1 ITPR3 S100PBP FNDC5 HPCA TMEM54 RNF19B AK2 AZIN2 TRIM62 ZNF362 A3GALT2 PHC2 ZSCAN20 CSMD2	ARHGAP24 WDFY3 CDS1 DDX10 ZC3H12C RDX FDX1 OTUD1 PTF1A IL17D XPO4 EV12A FAM19A1 KREMEN1 DBI SEMA5A POLB AK9 FIG4 GPR6 WASF1 CDC40 METTL24	DDX10 ZC3H12C RDX FDX1 OTUD1 PTF1A IL17D XPO4 EV12A FAM19A1 KREMEN1 DBI SEMA5A POLB AK9 FIG4 GPR6 WASF1 CDC40 METTL24	OTUD1 PTF1A IL17D XPO4 EV12A FAM19A1 KREMEN1 DBI SEMA5A POLB AK9 FIG4 GPR6 WASF1 CDC40 METTL24	IFT88 RAB11FIP4 SUCLG2 ZNR3 STEAP3 TAS2R1 POLB AK9 FIG4 GPR6 WASF1 CDC40 METTL24	RAB11FIP4 SUCLG2 ZNR3 STEAP3 TAS2R1 POLB AK9 FIG4 GPR6 WASF1 CDC40 METTL24	SUCLG2 ZNR3 STEAP3 TAS2R1 POLB AK9 FIG4 GPR6 WASF1 CDC40 METTL24	ZNR3 STEAP3 TAS2R1 POLB AK9 FIG4 GPR6 WASF1 CDC40 METTL24	STEAP3 TAS2R1 POLB AK9 FIG4 GPR6 WASF1 CDC40 METTL24	TAS2R1 POLB AK9 FIG4 GPR6 WASF1 CDC40 METTL24	POLB AK9 FIG4 GPR6 WASF1 CDC40 METTL24	AK9 FIG4 GPR6 WASF1 CDC40 METTL24