AGROTIS S.r.l.
00161 Roma, Via Giovanni Battista De Rossi, 7
P.IVA: 12501221001
PEC: agrotis.srl@pec.it

LABORATORIO GENETICA E SERVIZI
Via Bergamo 292, 26100 Cremona
Tel. 0372.560828 | info-lgs@agrotis.it | http://www.lgscr.it

ACCREDITED LABORATORY

CERTIFICATO DI IDENTIFICAZIONE GENETICA/ GENETIC IDENTIFICATION CERTIFICATE

NOME SOGGETTO NAME		SPECIE SPECIE	BOVINE	RAZZA BREAD	CHIANINA
MICROCHIP/MATRICOLA HERDBOOK N°/ID	IT057990172097	TATUAGGIO TATTOO		DATA NASCITA DATE OF BIRTH	
ROI/LOI/LIR		SESSO GENDER	M	GEMELLO MULTIPLE BIRTH	
PADRE SIRE	IT057990128951				
MADRE DAM	IT057990071024				
DIAGNOSI DIAGNOSIS	SIRE & DAM QUALIFY				

CLIENTE/CUSTOMER	**ANABIC, SS 317 – km 52,450, 06078 San Martino in colle (PG)**				
RAPPORTO DI PROVA n. TEST REPORT n	19CA00221	DATA EMISSIONE DATE OF ISSUE	06/03/2019		
DATA RICEVIMENTO CAMPIONI DELIVERY DATE	16/05/2018	DATA INIZIO PROVA TEST START DATE	23/05/2018	DATA FINE PROVA TEST END DATE	01/06/2018
CODICE INTERNO LGS LGS SAMPLE ID	18BO48276	MATRICE DNA FROM	EAR PUNCH		

Metodo di prova: *test method:*	Analisi molecolare tramite Illumina® beadchip/Molecular analysis with Illumina® beadchip
Incertezza di misura: *Uncertainty of measurement:*	
Informazioni: *Information:*	*La diagnosi del presente rapporto di prova è stata formulata tramite analisi del genotipo SNP attenendosi alle linee guida dell'International Society for Animal Genetics (ISAG) approvate alla conferenza di Cairns (Luglio 2012) e dell'Iternational Committee for Animal Recording (ICAR).* *The diagnosis of the present test report has been made through SNP profile analysis following the guidelines of the International Society for Animal Genetics (ISAG) approved at Cairns conference (July, 2012) and by the International Committee for Animal Recording (ICAR).*

Il prelievo ed il campionamento sono a carico del cliente / the customer is responsable for sampling

Il presente rapporto riguarda soltanto i campioni sottoposti a prova e non può essere riprodotto in forma parziale, salvo approvazione scritta di LGS
This report is relative to the analysed sample. Reproduction of partial copy of the document is not allowed without written authorization from LGS

IL RESPONSABILE DI LABORATORIO
THE LAB MANAGER

Dr. Raffaele Mazza

AGROTIS S.r.l.
00161 Roma, Via Giovanni Battista De Rossi, 7
P.IVA: 12501221001
PEC: agrotis.srl@pec.it

LABORATORIO GENETICA E SERVIZI
Via Bergamo 292, 26100 Cremona
Tel. 0372.560828 | info-lgs@agrotis.it | http://www.lgscr.it

ACCREDITED LABORATORY

GENOTIPO/GENOTYPE

Indice/Index	Nome Marker/Marker Name	AB Allele	TOP Allele
1	ARS-USMARC-Parent-AY761135-rs29003723	AA	AA
2	ARS-USMARC-Parent-AY776154-no-rs	BB	GG
3	ARS-USMARC-Parent-AY842472-rs29001941	AB	CG
4	ARS-USMARC-Parent-AY842473-rs29001956	BB	GG
5	ARS-USMARC-Parent-AY842474-rs29003226	AB	CG
6	ARS-USMARC-Parent-AY842475-rs29002127	AB	AG
7	ARS-USMARC-Parent-AY844963-rs17871338	BB	GG
8	ARS-USMARC-Parent-AY849381-rs29003287	AB	AG
9	ARS-USMARC-Parent-AY850194-no-rs	AB	AG
10	ARS-USMARC-Parent-AY851162-no-rs	BB	GG
11	ARS-USMARC-Parent-AY851163-rs17871661	AA	AA
12	ARS-USMARC-Parent-AY853302-no-rs	AB	AG
13	ARS-USMARC-Parent-AY853303-no-rs	AB	AG
14	ARS-USMARC-Parent-AY856094-rs17871190	AA	AA
15	ARS-USMARC-Parent-AY858890-rs29002256	AB	CG
16	ARS-USMARC-Parent-AY860426-no-rs	BB	CC
17	ARS-USMARC-Parent-AY863214-rs17871744	AA	AA
18	ARS-USMARC-Parent-AY914316-rs17871403	AB	AC
19	ARS-USMARC-Parent-AY916666-no-rs	BB	GG
20	ARS-USMARC-Parent-AY919868-rs29002211	BB	GG
21	ARS-USMARC-Parent-AY929334-no-rs	AB	AG
22	ARS-USMARC-Parent-AY937242-rs17872223	AA	AA
23	ARS-USMARC-Parent-AY939849-rs17870274	AA	AA
24	ARS-USMARC-Parent-AY941204-rs17872131	AB	AG
25	ARS-USMARC-Parent-AY943841-rs17871566	AA	AA
26	ARS-USMARC-Parent-DQ381152-rs29002408	BB	TT
27	ARS-USMARC-Parent-DQ381153-rs29012842	AA	AA
28	ARS-USMARC-Parent-DQ404149-no-rs	BB	GG
29	ARS-USMARC-Parent-DQ404150-rs29012530	BB	CC
30	ARS-USMARC-Parent-DQ404151-rs29019282	BB	GG
31	ARS-USMARC-Parent-DQ404152-rs29022245	AB	AG
32	ARS-USMARC-Parent-DQ404153-no-rs	BB	GG
33	ARS-USMARC-Parent-DQ435443-rs29010802	AB	AC
34	ARS-USMARC-Parent-DQ451555-rs29010795	AA	AA
35	ARS-USMARC-Parent-DQ468384-rs29003967	AB	AC
36	ARS-USMARC-Parent-DQ470475-no-rs	BB	TT
37	ARS-USMARC-Parent-DQ489377-rs29026932	AB	AG
38	ARS-USMARC-Parent-DQ500958-no-rs	BB	GG
39	ARS-USMARC-Parent-DQ647186-rs29014143	BB	GG
40	ARS-USMARC-Parent-DQ647187-rs29010510	AB	AG

AGROTIS S.r.l.
00161 Roma, Via Giovanni Battista De Rossi, 7
P.IVA: 12501221001
PEC: agrotis.srl@pec.it

LABORATORIO GENETICA E SERVIZI
Via Bergamo 292, 26100 Cremona
Tel. 0372.560828 | info-lgs@agrotis.it | http://www.lgscr.it

ACCREDITED LABORATORY

41	ARS-USMARC-Parent-DQ647189-rs29012226	AA	AA
42	ARS-USMARC-Parent-DQ647190-rs29013632	AA	AA
43	ARS-USMARC-Parent-DQ650635-rs29012174	BB	GG
44	ARS-USMARC-Parent-DQ650636-rs29024525	AB	AG
45	ARS-USMARC-Parent-DQ674265-rs29011266	AA	AA
46	ARS-USMARC-Parent-DQ786757-rs29019900	BB	GG
47	ARS-USMARC-Parent-DQ786758-rs29024430	BB	CC
48	ARS-USMARC-Parent-DQ786759-rs29026696	AB	AG
49	ARS-USMARC-Parent-DQ786761-rs29012840	AA	AA
50	ARS-USMARC-Parent-DQ786762-rs29010772	AB	AC
51	ARS-USMARC-Parent-DQ786763-rs29020472	BB	TT
52	ARS-USMARC-Parent-DQ786764-no-rs	AA	AA
53	ARS-USMARC-Parent-DQ786766-rs29012070	AB	AG
54	ARS-USMARC-Parent-DQ789028-rs29017713	BB	GG
55	ARS-USMARC-Parent-DQ837643-rs29018818	BB	GG
56	ARS-USMARC-Parent-DQ837644-rs29010468	BB	CC
57	ARS-USMARC-Parent-DQ837645-rs29015870	AB	AG
58	ARS-USMARC-Parent-DQ839235-rs29012691	BB	CC
59	ARS-USMARC-Parent-DQ846688-rs29023691	AB	AG
60	ARS-USMARC-Parent-DQ846690-no-rs	AA	AA
61	ARS-USMARC-Parent-DQ846691-rs29019814	AA	AA
62	ARS-USMARC-Parent-DQ846692-rs29010281	AB	AG
63	ARS-USMARC-Parent-DQ846693-rs29017621	AA	AA
64	ARS-USMARC-Parent-DQ866817-no-rs	BB	GG
65	ARS-USMARC-Parent-DQ866818-rs29011701	AA	AA
66	ARS-USMARC-Parent-DQ888309-rs29013741	AA	AA
67	ARS-USMARC-Parent-DQ888310-rs29012422	AB	AC
68	ARS-USMARC-Parent-DQ888311-rs29017313	AB	AC
69	ARS-USMARC-Parent-DQ888313-no-rs	AB	AG
70	ARS-USMARC-Parent-DQ916057-rs29009979	AA	AA
71	ARS-USMARC-Parent-DQ916058-rs29016146	AB	AG
72	ARS-USMARC-Parent-DQ916059-rs29009907	AB	AG
73	ARS-USMARC-Parent-DQ984825-rs29012457	BB	GG
74	ARS-USMARC-Parent-DQ984826-rs29027559	AA	AA
75	ARS-USMARC-Parent-DQ984827-rs29012019	AB	AG
76	ARS-USMARC-Parent-DQ990832-rs29015065	AB	AG
77	ARS-USMARC-Parent-DQ990833-rs29010147	BB	GG
78	ARS-USMARC-Parent-DQ990834-rs29013727	AB	AG
79	ARS-USMARC-Parent-DQ995976-no-rs	AB	AG
80	ARS-USMARC-Parent-DQ995977-rs29020834	AB	AG
81	ARS-USMARC-Parent-EF026084-rs29025380	AA	AA
82	ARS-USMARC-Parent-EF026086-rs29013660	AB	AG
83	ARS-USMARC-Parent-EF026087-rs29011643	AB	AG

AGROTIS S.r.l.
00161 Roma, Via Giovanni Battista De Rossi, 7
P.IVA: 12501221001
PEC: agrotis.srl@pec.it

LABORATORIO GENETICA E SERVIZI
Via Bergamo 292, 26100 Cremona
Tel. 0372.560828 | info-lgs@agrotis.it | http://www.lgscr.it

ACCREDITED LABORATORY

84	ARS-USMARC-Parent-EF028073-rs29014953	AA	AA
85	ARS-USMARC-Parent-EF034080-rs29024749	AB	AG
86	ARS-USMARC-Parent-EF034081-rs29009668	BB	TT
87	ARS-USMARC-Parent-EF034082-rs29013532	BB	GG
88	ARS-USMARC-Parent-EF034083-rs29018286	BB	CC
89	ARS-USMARC-Parent-EF034084-rs29016185	BB	GG
90	ARS-USMARC-Parent-EF034085-rs29025677	AB	AG
91	ARS-USMARC-Parent-EF034086-no-rs	BB	GG
92	ARS-USMARC-Parent-EF034087-no-rs	BB	GG
93	ARS-USMARC-Parent-EF042090-no-rs	AA	AA
94	ARS-USMARC-Parent-EF042091-rs29014974	BB	GG
95	ARS-USMARC-Parent-EF093509-rs29015170	BB	TT
96	ARS-USMARC-Parent-EF093511-rs29012316	AA	AA
97	ARS-USMARC-Parent-EF093512-rs29013546	AB	CG
98	ARS-USMARC-Parent-EF141102-rs29015783	AB	AG
99	ARS-USMARC-Parent-EF150946-rs29023666	AB	AG
100	ARS-USMARC-Parent-EF164803-rs29011141	AB	AG
101	ARS-BFGL-BAC-19454	AB	AG
102	ARS-BFGL-BAC-27364	AB	AC
103	ARS-BFGL-BAC-35552	AB	AG
104	ARS-BFGL-NGS-10035	AA	AA
105	ARS-BFGL-NGS-101456	AB	AG
106	ARS-BFGL-NGS-102169	BB	CC
107	ARS-BFGL-NGS-106015	AA	AA
108	ARS-BFGL-NGS-111053	AA	AA
109	ARS-BFGL-NGS-111076	AB	AG
110	ARS-BFGL-NGS-111114	AB	AC
111	ARS-BFGL-NGS-112094	AA	AA
112	ARS-BFGL-NGS-112325	BB	GG
113	ARS-BFGL-NGS-11383	AA	AA
114	ARS-BFGL-NGS-114006	BB	GG
115	ARS-BFGL-NGS-115514	BB	GG
116	ARS-BFGL-NGS-117319	BB	GG
117	ARS-BFGL-NGS-117322	AA	AA
118	ARS-BFGL-NGS-118319	BB	CC
119	ARS-BFGL-NGS-118340	AA	AA
120	ARS-BFGL-NGS-119662	AB	AG
121	ARS-BFGL-NGS-14740	BB	GG
122	ARS-BFGL-NGS-15506	BB	GG
123	ARS-BFGL-NGS-15731	AA	AA
124	ARS-BFGL-NGS-24419	AB	AG
125	ARS-BFGL-NGS-26517	AB	AG
126	ARS-BFGL-NGS-27577	AB	AG

AGROTIS S.r.l.
00161 Roma, Via Giovanni Battista De Rossi, 7
P.IVA: 12501221001
PEC: agrotis.srl@pec.it

LABORATORIO GENETICA E SERVIZI
Via Bergamo 292, 26100 Cremona
Tel. 0372.560828 | info-lgs@agrotis.it | http://www.lgscr.it

ACCREDITED LABORATORY

127	ARS-BFGL-NGS-31640	BB	GG
128	ARS-BFGL-NGS-31807	BB	GG
129	ARS-BFGL-NGS-36513	AA	AA
130	ARS-BFGL-NGS-38423	BB	GG
131	ARS-BFGL-NGS-38620	AB	AG
132	ARS-BFGL-NGS-39978	AB	AG
133	ARS-BFGL-NGS-42283	AB	AG
134	ARS-BFGL-NGS-42505	AB	AG
135	ARS-BFGL-NGS-55943	BB	GG
136	ARS-BFGL-NGS-57711	AA	AA
137	ARS-BFGL-NGS-58613	AB	AG
138	ARS-BFGL-NGS-67146	AA	AA
139	ARS-BFGL-NGS-70946	BB	CC
140	ARS-BFGL-NGS-72471	BB	CC
141	ARS-BFGL-NGS-76191	AB	AG
142	ARS-BFGL-NGS-76330	AA	AA
143	ARS-BFGL-NGS-86662	AB	AC
144	ARS-BFGL-NGS-93119	AB	AG
145	ARS-BFGL-NGS-96125	BB	GG
146	ARS-BFGL-NGS-99210	BB	GG
147	ARS-USMARC-569	AB	AG
148	ARS-USMARC-Parent-AY841151-rs29003466	BB	CC
149	ARS-USMARC-Parent-DQ786765-rs29009858	AA	AA
150	ARS-USMARC-Parent-EF026085-rs29021607	AB	AC
151	ARS-USMARC-Parent-EF089234-rs29020870	AA	AA
152	BTA-100621-no-rs	BB	GG
153	BTA-11701-rs29017459	AB	AG
154	BTA-30857-no-rs	BB	GG
155	BTA-37062-no-rs	AB	AC
156	BTA-73768-no-rs	AA	AA
157	BTA-92021-no-rs	AB	AT
158	BTB-00188171	BB	GG
159	BTB-00394801	AB	AC
160	BTB-00420215	AA	AA
161	BTB-00818821	BB	GG
162	BTB-01057979	BB	GG
163	BTB-01285245	AB	AG
164	BTB-01371672	AB	AG
165	BTB-01416427	BB	GG
166	BTB-01478115	AA	AA
167	BTB-01902778	AB	AG
168	BTB-01980499	AB	AG
169	Hapmap24215-BTA-163266	AB	AC

AGROTIS S.r.l.
00161 Roma, Via Giovanni Battista De Rossi, 7
P.IVA: 12501221001
PEC: agrotis.srl@pec.it

LABORATORIO GENETICA E SERVIZI
Via Bergamo 292, 26100 Cremona
Tel. 0372.560828 | info-lgs@agrotis.it | http://www.lgscr.it

ACCREDITED LABORATORY

170	Hapmap31098-BTA-136127	AB	AG
171	Hapmap34424-BES10_Contig566_926	AA	AA
172	Hapmap35535-SCAFFOLD86180_8791	AA	AA
173	Hapmap36588-SCAFFOLD90561_9460	BB	GG
174	Hapmap39425-BTA-70290	AB	AC
175	Hapmap39461-BTA-109898	AB	AC
176	Hapmap40148-BTA-92999	AA	AA
177	Hapmap40729-BTA-40319	BB	GG
178	Hapmap41591-BTA-59790	AA	AA
179	Hapmap42648-BTA-71195	BB	GG
180	Hapmap43057-BTA-80741	AA	AA
181	Hapmap43142-BTA-107561	AB	AG
182	Hapmap43792-BTA-122725	AB	AG
183	Hapmap43953-BTA-83292	AB	AG
184	Hapmap46550-BTA-103548	AB	AT
185	Hapmap46653-BTA-47447	AA	AA
186	Hapmap47281-BTA-40051	AA	AA
187	Hapmap49452-BTA-112834	AB	AG
188	Hapmap50598-BTA-122724	AB	AG
189	Hapmap51227-BTA-41809	AB	AG
190	Hapmap51527-BTA-97415	AB	AG
191	Hapmap51908-BTA-63031	BB	GG
192	Hapmap52240-rs29013844	AB	AC
193	Hapmap54020-rs29023153	BB	GG
194	Hapmap54313-rs29012632	AB	AG
195	Hapmap54547-rs29012198	AA	AA
196	Hapmap55441-rs29010990	BB	GG
197	Hapmap59876-rs29018046	AA	AA
198	Hapmap60017-rs29023471	AA	AA
199	UA-IFASA-5034	BB	GG
200	UA-IFASA-6532	AB	AG