



AGROTIS S.r.l.
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CERTIFICATO DI IDENTIFICAZIONE GENETICA/ GENETIC IDENTIFICATION CERTIFICATE

NOME SOGGETTO NAME		SPECIE SPECIE	BOVINE	RAZZA BREAD	CHIANINA
MICROCHIP/MATRICOLA HERDBOOK N°/ID	IT054990219422	TATUAGGIO TATTOO		DATA NASCITA DATE OF BIRTH	
ROI/LOI/LIR		SESSO GENDER	M	GEMELLO MULTIPLE BIRTH	
PADRE SIRE	IT049990009453				
MADRE DAM	IT054990110301				
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	18PR002004	DATA EMISSIONE DATE OF ISSUE	27/08/2018		
DATA RICEVIMENTO CAMPIONI DELIVERY DATE	24/11/2017	DATA INIZIO PROVA TEST START DATE	14/12/2017	DATA FINE PROVA TEST END DATE	19/01/2018
CODICE INTERNO LGS LGS SAMPLE ID	17BO57747	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'International 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 responsible 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



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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	AB	AG
3	ARS-USMARC-Parent-AY842472-rs29001941	AA	CC
4	ARS-USMARC-Parent-AY842473-rs29001956	AA	AA
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	AB	AG
11	ARS-USMARC-Parent-AY851163-rs17871661	AB	AG
12	ARS-USMARC-Parent-AY853302-no-rs	AA	AA
13	ARS-USMARC-Parent-AY853303-no-rs	AA	AA
14	ARS-USMARC-Parent-AY856094-rs17871190	AA	AA
15	ARS-USMARC-Parent-AY858890-rs29002256	AA	CC
16	ARS-USMARC-Parent-AY860426-no-rs	AA	AA
17	ARS-USMARC-Parent-AY863214-rs17871744	BB	GG
18	ARS-USMARC-Parent-AY914316-rs17871403	AB	AC
19	ARS-USMARC-Parent-AY916666-no-rs	AB	AG
20	ARS-USMARC-Parent-AY919868-rs29002211	BB	GG
21	ARS-USMARC-Parent-AY929334-no-rs	AB	AG
22	ARS-USMARC-Parent-AY937242-rs17872223	AB	AG
23	ARS-USMARC-Parent-AY939849-rs17870274	AB	AG
24	ARS-USMARC-Parent-AY941204-rs17872131	BB	GG
25	ARS-USMARC-Parent-AY943841-rs17871566	BB	GG
26	ARS-USMARC-Parent-DQ381152-rs29002408	AA	AA
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	AA	AA
32	ARS-USMARC-Parent-DQ404153-no-rs	BB	GG
33	ARS-USMARC-Parent-DQ435443-rs29010802	AB	AC
34	ARS-USMARC-Parent-DQ451555-rs29010795	AB	AG
35	ARS-USMARC-Parent-DQ468384-rs29003967	BB	CC
36	ARS-USMARC-Parent-DQ470475-no-rs	BB	TT
37	ARS-USMARC-Parent-DQ489377-rs29026932	AA	AA
38	ARS-USMARC-Parent-DQ500958-no-rs	AA	AA
39	ARS-USMARC-Parent-DQ647186-rs29014143	BB	GG
40	ARS-USMARC-Parent-DQ647187-rs29010510	AB	AG
41	ARS-USMARC-Parent-DQ647189-rs29012226	AB	AG
42	ARS-USMARC-Parent-DQ647190-rs29013632	AB	AG
43	ARS-USMARC-Parent-DQ650635-rs29012174	BB	GG
44	ARS-USMARC-Parent-DQ650636-rs29024525	BB	GG
45	ARS-USMARC-Parent-DQ674265-rs29011266	AA	AA
46	ARS-USMARC-Parent-DQ786757-rs29019900	BB	GG
47	ARS-USMARC-Parent-DQ786758-rs29024430	AB	AC
48	ARS-USMARC-Parent-DQ786759-rs29026696	AB	AG
49	ARS-USMARC-Parent-DQ786761-rs29012840	AB	AG



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50	ARS-USMARC-Parent-DQ786762-rs29010772	AA	AA
51	ARS-USMARC-Parent-DQ786763-rs29020472	AB	AT
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	AA	AA
56	ARS-USMARC-Parent-DQ837644-rs29010468	BB	CC
57	ARS-USMARC-Parent-DQ837645-rs29015870	BB	GG
58	ARS-USMARC-Parent-DQ839235-rs29012691	AB	AC
59	ARS-USMARC-Parent-DQ846688-rs29023691	BB	GG
60	ARS-USMARC-Parent-DQ846690-no-rs	AA	AA
61	ARS-USMARC-Parent-DQ846691-rs29019814	BB	GG
62	ARS-USMARC-Parent-DQ846692-rs29010281	AB	AG
63	ARS-USMARC-Parent-DQ846693-rs29017621	AA	AA
64	ARS-USMARC-Parent-DQ866817-no-rs	AB	AG
65	ARS-USMARC-Parent-DQ866818-rs29011701	AB	AC
66	ARS-USMARC-Parent-DQ888309-rs29013741	BB	CC
67	ARS-USMARC-Parent-DQ888310-rs29012422	BB	CC
68	ARS-USMARC-Parent-DQ888311-rs29017313	BB	CC
69	ARS-USMARC-Parent-DQ888313-no-rs	AB	AG
70	ARS-USMARC-Parent-DQ916057-rs29009979	AB	AT
71	ARS-USMARC-Parent-DQ916058-rs29016146	AB	AG
72	ARS-USMARC-Parent-DQ916059-rs29009907	AA	AA
73	ARS-USMARC-Parent-DQ984825-rs29012457	AB	AG
74	ARS-USMARC-Parent-DQ984826-rs29027559	BB	TT
75	ARS-USMARC-Parent-DQ984827-rs29012019	AB	AG
76	ARS-USMARC-Parent-DQ990832-rs29015065	AA	AA
77	ARS-USMARC-Parent-DQ990833-rs29010147	AA	AA
78	ARS-USMARC-Parent-DQ990834-rs29013727	AA	AA
79	ARS-USMARC-Parent-DQ995976-no-rs	AA	AA
80	ARS-USMARC-Parent-DQ995977-rs29020834	AA	AA
81	ARS-USMARC-Parent-EF026084-rs29025380	AA	AA
82	ARS-USMARC-Parent-EF026086-rs29013660	AB	AG
83	ARS-USMARC-Parent-EF026087-rs29011643	AB	AG
84	ARS-USMARC-Parent-EF028073-rs29014953	AB	AG
85	ARS-USMARC-Parent-EF034080-rs29024749	AB	AG
86	ARS-USMARC-Parent-EF034081-rs29009668	AB	AT
87	ARS-USMARC-Parent-EF034082-rs29013532	AB	AG
88	ARS-USMARC-Parent-EF034083-rs29018286	AB	AC
89	ARS-USMARC-Parent-EF034084-rs29016185	BB	GG
90	ARS-USMARC-Parent-EF034085-rs29025677	AA	AA
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	AB	AG
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	AA	AA
100	ARS-USMARC-Parent-EF164803-rs29011141	AB	AG
101	ARS-BFGL-BAC-19454	AA	AA



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102	ARS-BFGL-BAC-27364	AB	AC
103	ARS-BFGL-BAC-35552	AB	AG
104	ARS-BFGL-NGS-10035	AB	AG
105	ARS-BFGL-NGS-101456	AA	AA
106	ARS-BFGL-NGS-102169	BB	CC
107	ARS-BFGL-NGS-106015	AA	AA
108	ARS-BFGL-NGS-111053	BB	GG
109	ARS-BFGL-NGS-111076	AA	AA
110	ARS-BFGL-NGS-111114	BB	CC
111	ARS-BFGL-NGS-112094	AB	AG
112	ARS-BFGL-NGS-112325	BB	GG
113	ARS-BFGL-NGS-11383	AA	AA
114	ARS-BFGL-NGS-114006	AA	AA
115	ARS-BFGL-NGS-115514	AB	AG
116	ARS-BFGL-NGS-117319	BB	GG
117	ARS-BFGL-NGS-117322	AA	AA
118	ARS-BFGL-NGS-118319	AA	AA
119	ARS-BFGL-NGS-118340	AB	AC
120	ARS-BFGL-NGS-119662	BB	GG
121	ARS-BFGL-NGS-14740	BB	GG
122	ARS-BFGL-NGS-15506	AB	AG
123	ARS-BFGL-NGS-15731	BB	GG
124	ARS-BFGL-NGS-24419	BB	GG
125	ARS-BFGL-NGS-26517	AB	AG
126	ARS-BFGL-NGS-27577	AB	AG
127	ARS-BFGL-NGS-31640	AB	AG
128	ARS-BFGL-NGS-31807	AB	AG
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	AA	AA
136	ARS-BFGL-NGS-57711	AB	AG
137	ARS-BFGL-NGS-58613	AB	AG
138	ARS-BFGL-NGS-67146	AB	AG
139	ARS-BFGL-NGS-70946	AB	AC
140	ARS-BFGL-NGS-72471	AB	AC
141	ARS-BFGL-NGS-76191	AA	AA
142	ARS-BFGL-NGS-76330	AA	AA
143	ARS-BFGL-NGS-86662	AA	AA
144	ARS-BFGL-NGS-93119	AA	AA
145	ARS-BFGL-NGS-96125	BB	GG
146	ARS-BFGL-NGS-99210	AB	AG
147	ARS-USMARC-569	BB	GG
148	ARS-USMARC-Parent-AY841151-rs29003466	AB	AC
149	ARS-USMARC-Parent-DQ786765-rs29009858	AB	AC
150	ARS-USMARC-Parent-EF026085-rs29021607	AA	AA
151	ARS-USMARC-Parent-EF089234-rs29020870	AB	AT
153	BTA-11701-rs29017459	BB	GG
154	BTA-30857-no-rs	BB	GG



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155	BTA-37062-no-rs	AA	AA
156	BTA-73768-no-rs	AA	AA
157	BTA-92021-no-rs	AB	AT
158	BTB-00188171	BB	GG
159	BTB-00394801	AA	AA
160	BTB-00420215	AB	AC
161	BTB-00818821	BB	GG
162	BTB-01057979	AB	AG
163	BTB-01285245	BB	GG
164	BTB-01371672	AA	AA
165	BTB-01416427	BB	GG
166	BTB-01478115	AB	AG
167	BTB-01902778	AB	AG
168	BTB-01980499	BB	GG
169	Hapmap24215-BTA-163266	AB	AC
170	Hapmap31098-BTA-136127	BB	GG
171	Hapmap34424-BES10_Contig566_926	AA	AA
172	Hapmap35535-SCAFFOLD86180_8791	AB	AG
173	Hapmap36588-SCAFFOLD90561_9460	BB	GG
174	Hapmap39425-BTA-70290	BB	CC
175	Hapmap39461-BTA-109898	AB	AC
176	Hapmap40148-BTA-92999	BB	CC
177	Hapmap40729-BTA-40319	BB	GG
178	Hapmap41591-BTA-59790	BB	GG
179	Hapmap42648-BTA-71195	AB	AG
180	Hapmap43057-BTA-80741	AB	AG
181	Hapmap43142-BTA-107561	BB	GG
182	Hapmap43792-BTA-122725	AA	AA
183	Hapmap43953-BTA-83292	BB	GG
184	Hapmap46550-BTA-103548	AA	AA
185	Hapmap46653-BTA-47447	AB	AT
186	Hapmap47281-BTA-40051	AA	AA
187	Hapmap49452-BTA-112834	AA	AA
188	Hapmap50598-BTA-122724	AA	AA
189	Hapmap51227-BTA-41809	AB	AG
190	Hapmap51527-BTA-97415	BB	GG
191	Hapmap51908-BTA-63031	AB	AG
192	Hapmap52240-rs29013844	AA	AA
193	Hapmap54020-rs29023153	AA	AA
194	Hapmap54313-rs29012632	AA	AA
195	Hapmap54547-rs29012198	AA	AA
196	Hapmap55441-rs29010990	BB	GG
197	Hapmap59876-rs29018046	AA	AA
198	Hapmap60017-rs29023471	AB	AG
199	UA-IFASA-5034	BB	GG
200	UA-IFASA-6532	AA	AA