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CATTLE MUTATION ANALYSIS REPORT

Order Information

Name:	Van Kerken Bonsmara	Print Date:	12/6/2023
Telephone No.:	(83) 232-2147	Date received:	12/1/2023
E-mail address:	andrew.vankerken@mail.com	No. samples:	39

Description of Procedure

Molecular genotyping for Double Muscling (Myostatin: F94L, Q204X and Nt821). The genotype for each known mutation region is presented below where WT refers to the wild type genotype and MUT refers to the mutated genotype. All mutant genotypes will be highlighted in red.

Lab No.	Sample ID	Double Muscling (Myostatin)					
		Q204X		Nt821		F94L	
ZOCA2023/60852	AVK220012	WT	WT	WT	WT	WT	WT
ZOCA2023/60853	AVK220024	WT	WT	WT	WT	WT	WT
ZOCA2023/60854	AVK220028	WT	WT	WT	WT	WT	WT
ZOCA2023/60855	AVK220029	WT	WT	WT	WT	WT	WT
ZOCA2023/60856	AVK220031	WT	WT	WT	WT	WT	WT
ZOCA2023/60857	AVK220036	WT	WT	WT	WT	WT	WT
ZOCA2023/60858	AVK220039	WT	WT	WT	WT	WT	WT
ZOCA2023/60859	AVK220054	WT	WT	WT	WT	WT	WT
ZOCA2023/60860	AVK220068	WT	WT	WT	WT	WT	WT
ZOCA2023/60861	AVK220070	WT	WT	WT	WT	WT	WT
ZOCA2023/60862	AVK220071	WT	WT	WT	WT	WT	WT
ZOCA2023/60863	AVK220093	WT	MUT	WT	WT	WT	WT
ZOCA2023/60864	AVK220099	WT	WT	WT	WT	WT	WT
ZOCA2023/60865	AVK220110	WT	WT	WT	WT	WT	WT
ZOCA2023/60866	AVK220111	WT	WT	WT	WT	WT	WT
ZOCA2023/60867	AVK220115	WT	WT	WT	WT	WT	WT
ZOCA2023/60868	AVK220117	WT	WT	WT	WT	WT	WT
ZOCA2023/60869	AVK220134	WT	WT	WT	WT	WT	WT
ZOCA2023/60870	AVK220135	WT	WT	WT	WT	WT	WT
ZOCA2023/60871	AVK220136	WT	WT	WT	WT	WT	WT
ZOCA2023/60872	AVK220140	WT	MUT	WT	WT	WT	WT
ZOCA2023/60873	AVK220142	WT	WT	WT	WT	WT	WT
ZOCA2023/60874	AVK220148	WT	WT	WT	WT	WT	WT
ZOCA2023/60875	AVK220152	WT	WT	WT	WT	WT	WT
ZOCA2023/60876	AVK220180	WT	WT	WT	WT	WT	WT
ZOCA2023/60877	AVK220199	WT	WT	WT	WT	WT	WT
ZOCA2023/60878	AVK220200	WT	WT	WT	WT	WT	WT
ZOCA2023/60879	AVK220202	WT	WT	WT	WT	WT	WT
ZOCA2023/60880	AVK220203	WT	WT	WT	WT	WT	WT
ZOCA2023/60881	AVK220213	WT	WT	WT	WT	WT	WT

ZOCA2023/60882	AVK220217	WT	WT	WT	WT	WT	WT
ZOCA2023/60883	AVK220218	WT	WT	WT	WT	WT	WT
ZOCA2023/60884	AVK220244	WT	MUT	WT	WT	WT	WT
ZOCA2023/60885	AVK220248	WT	MUT	WT	WT	WT	WT
ZOCA2023/60886	AVK220249	WT	WT	WT	WT	WT	WT
ZOCA2023/60887	AVK220250	WT	WT	WT	WT	WT	WT
ZOCA2023/60888	AVK220262	WT	WT	WT	WT	WT	WT
ZOCA2023/60889	AVK220265	WT	WT	WT	WT	WT	WT
ZOCA2023/60890	AVK220270	WT	WT	WT	WT	WT	WT



Dr Christiaan Labuschagne
Genomics Manager

12/6/2023

Date

****Disclaimer**

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It is the responsibility of the client that all biological samples are available or has previously been submitted, and corresponds with all requested samples listed on the sample submission form. Inqaba Biotechnical Industries Pty Ltd and the divisions thereof does not accept responsibility for the effect of any absent samples on the analysis results;

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Inqaba Biotechnical Industries Pty Ltd and the divisions thereof shall not be responsible for human and/or technical errors that could not have been foreseen;

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The DNA profile is based on a preliminary marker panel that is subject to modification pending additional genetic information;

It is the sender's responsibility to obtain permits when sending samples where required;

Inqaba Biotechnical Industries Pty Ltd and the divisions thereof reserves the right to decline testing of samples;

No guarantees are made with regards to turn-around time and results, and no liability will be accepted for any delays.



CATTLE MUTATION ANALYSIS REPORT

Owner/Sender Information

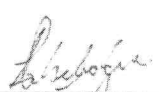
Name:	Van Kerken Bonsmara
Telephone No.:	(83) 232-2147
E-mail:	andrew.vanerken@mail.com

Print Date:	2023/12/07
Date received:	2023/12/01
No. samples:	1

Description of Procedure

Molecular screening of the polled (Celtic) in the BTA1 gene. The presence of the indel mutation will be indicated as MUT/MUT for homozygous polled animals, WT/WT for homozygous unaffected horned animals and WT/MUT for heterozygous polled animals.

Lab No.	Sample ID	Result	Lab No.	Sample ID	Result
ZOCA2023/60890	AVK220270	WT/WT			


Dr Christiaan Labuschagne
Genomics Manager

2023/12/07
Date

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Date Printed: 2023/12/07

DNA PROFILE CERTIFICATE

General Information:

Test Animal	
ANIMAL ID/NAME	AVK220024
BREED	BONSMARA
SPECIES	CATTLE
GENDER	Male
OWNER	J.A VAN KERKEN
LAB. NO	ZOCA2023-60853

DNA Profiling Results:

STR Marker	Allele 1	Allele 2
TGLA227	89	93
BM2113	121	135
TGLA053	160	160
ETH10	211	211
ILSTS011	268	268
SPS113	Not Detected	
RM067	90	90
TGLA126	117	125
TGLA122	143	143
INRA023	196	196

STR Marker	Allele 1	Allele 2
BM1818	260	264
ETH003	117	121
ETH225	150	150
BM1824	182	188
SPS115	248	261
CSRM060	92	102
MGTG4B	135	137
CSSM066	187	187
ILSTS006	294	298

The DNA profile represents the standardised alleles for the 12 International Society for Animal Genetics (ISAG, 2016) recommended markers. These alleles were obtained from STR analysis by capillary electrophoresis. The DNA profile includes additional markers as recommended by the Food and Agriculture Organization of the United Nations (FAO) for routine bovine parentage testing and identification.



Dr Christiaan Labuschagne
 Genomics Manager

06 December 2023

Date

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ISAG
 Institutional Member

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06-Mar-15

DNA PROFILE CERTIFICATE

General Information:

Test Animal	
ANIMAL ID/NAME	AVK220070
BREED	BONSMARA
SPECIES	CATTLE
GENDER	Male
OWNER	J.A VAN KERKEN
LAB. NO	ZOCA2023-60861

DNA Profiling Results:

STR Marker	Allele 1	Allele 2
TGLA227	81	93
BM2113	125	139
TGLA053	160	160
ETH10	217	217
ILSTS011	266	268
SPS113	Not Detected	
RM067	92	102
TGLA126	115	115
TGLA122	143	151
INRA023	196	206

STR Marker	Allele 1	Allele 2
BM1818	262	264
ETH003	121	125
ETH225	150	151
BM1824	182	188
SPS115	248	248
CSRM060	100	102
MGTG4B	135	141
CSSM066	185	185
ILSTS006	294	296

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DNA PROFILE CERTIFICATE

General Information:

Test Animal	
ANIMAL ID/NAME	AVK220093
BREED	BONSMARA
SPECIES	CATTLE
GENDER	Male
OWNER	J.A VAN KERKEN
LAB. NO	ZOCA2023-60863

DNA Profiling Results:

STR Marker	Allele 1	Allele 2
TGLA227	77	89
BM2113	133	137
TGLA053	154	158
ETH10	211	211
ILSTS011	268	268
SPS113	Not Detected	
RM067	102	102
TGLA126	115	117
TGLA122	143	183
INRA023	196	198

STR Marker	Allele 1	Allele 2
BM1818	266	270
ETH003	117	125
ETH225	151	154
BM1824	180	182
SPS115	248	254
CSRM060	102	114
MGTG4B	135	137
CSSM066	189	189
ILSTS006	288	294

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DNA PROFILE CERTIFICATE

General Information:

Test Animal	
ANIMAL ID/NAME	AVK220117
BREED	BONSMARA
SPECIES	CATTLE
GENDER	Male
OWNER	J.A VAN KERKEN
LAB. NO	ZOCA2023-60868

DNA Profiling Results:

STR Marker	Allele 1	Allele 2
TGLA227	89	97
BM2113	125	139
TGLA053	154	160
ETH10	211	211
ILSTS011	268	268
SPS113	Not Detected	
RM067	90	90
TGLA126	115	115
TGLA122	137	151
INRA023	206	208

STR Marker	Allele 1	Allele 2
BM1818	260	266
ETH003	117	127
ETH225	140	148
BM1824	182	188
SPS115	248	248
CSRM060	100	102
MGTG4B	137	143
CSSM066	185	185
ILSTS006	294	294

The DNA profile represents the standardised alleles for the 12 International Society for Animal Genetics (ISAG, 2016) recommended markers. These alleles were obtained from STR analysis by capillary electrophoresis. The DNA profile includes additional markers as recommended by the Food and Agriculture Organization of the United Nations (FAO) for routine bovine parentage testing and identification.



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