



Tel:

071 493 21 37

Email:

info@ZooOmics.co.za

Physical Address:

525 Justice Mahomed Str, Muckleneuk, Pretoria 0002

Postal Address:

PO Box 14356, Hatfield, Pretoria 0028

DNA PROFILE CERTIFICATE

General Information:

Test Animal	
ANIMAL ID/NAME	DO170083
MICROCHIP NUMBER	Not Provided
SPECIES	CATTLE
GENDER	Male
OWNER	FM DE JAGER
LAB. NO	ZOBOS20-02968 ✓

DNA Profiling Results:

STR Marker	Allele 1	Allele 2
TGLA227	Not Detected	
BM2113	131	141
TGLA053	Not Detected	
ETH10	213	217
ILSTS011	261	261
SPS113	135	141
RM067	90	96
TGLA126	Not Detected	
TGLA122	137	171
INRA023	210	214

STR Marker	Allele 1	Allele 2
BM1818	262	262
ETH003	117	121
ETH225	150	150
BM1824	180	182
SPS115	248	256
CSRM060	92	102
MG TG4B	137	151
CSSM066	181	183
ILSTS006	Not Detected	

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.

Ms Mischra Fraser
ZooOmics™ Manager

24 April 2020

Date

Dr Christiaan Labuschagne
Genomics Manager

24 April 2020

Date

**See disclaimer on reverse side





Tel:

071 493 21 37

Email:

info@ZooOmics.co.za

Physical Address:

525 Justice Mahomed Str, Muckleneuk, Pretoria 0002

Postal Address:

PO Box 14356, Hatfield, Pretoria 0028

DNA PROFILE CERTIFICATE

General Information:

Test Animal	
ANIMAL ID/NAME	DO170090
MICROCHIP NUMBER	Not Provided
SPECIES	CATTLE
GENDER	Male
OWNER	FM DE JAGER
LAB. NO	ZOBOS20-02969 ✓

DNA Profiling Results:

STR Marker	Allele 1	Allele 2
TGLA227	Not Detected	
BM2113	135	137
TGLA053	Not Detected	
ETH10	209	217
ILSTS011	263	268
SPS113	141	143
RM067	102	102
TGLA126	115	125
TGLA122	137	151
INRA023	196	206

STR Marker	Allele 1	Allele 2
BM1818	262	266
ETH003	117	121
ETH225	148	148
BM1824	188	188
SPS115	252	254
CSRM060	92	92
MGTG4B	141	149
CSSM066	185	199
ILSTS006	288	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.

Ms Miscna Fraser
ZooOmics™ Manager

24 April 2020

Date

Dr Christiaan Labuschagne
Genomics Manager

24 April 2020

Date

**See disclaimer on reverse side





Tel:
Email:
Physical Address:
Postal Address:

071 493 21 37
info@ZooOmics.co.za
525 Justice Mahomed Str, Muckleneuk, Pretoria 0002
PO Box 14356, Hatfield, Pretoria 0028

DNA PROFILE CERTIFICATE

General Information:

Test Animal	
ANIMAL ID/NAME	DO170093
MICROCHIP NUMBER	Not Provided
SPECIES	CATTLE
GENDER	Male
OWNER	FM DE JAGER
LAB. NO	ZOBOS20-02970 ✓

DNA Profiling Results:

STR Marker	Allele 1	Allele 2
TGLA227	Not Detected	
BM2113	137	141
TGLA053	Not Detected	
ETH10	217	219
ILSTS011	261	268
SPS113	143	151
RM067	90	92
TGLA126	119	119
TGLA122	137	151
INRA023	206	214

STR Marker	Allele 1	Allele 2
BM1818	262	262
ETH003	117	121
ETH225	142	148
BM1824	188	188
SPS115	248	254
CSRM060	92	100
MGTG4B	149	151
CSSM066	185	199
ILSTS006	292	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.

Ms Mischra Fraser
ZooOmics™ Manager

24 April 2020

Date

Dr Christiaan Labuschagne
Genomics Manager

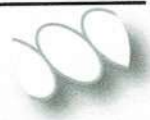
24 April 2020

Date

**See disclaimer on reverse side

ISAG

Institutional Member





Tel:

071 493 21 37

Email:

info@ZooOmics.co.za

Physical Address:

525 Justice Mahomed Str, Muckleneuk, Pretoria 0002

Postal Address:

PO Box 14356, Hatfield, Pretoria 0028

DNA PROFILE CERTIFICATE

General Information:

Test Animal	
ANIMAL ID/NAME	DO170095
MICROCHIP NUMBER	Not Provided
SPECIES	CATTLE
GENDER	Male
OWNER	FM DE JAGER
LAB. NO	ZOBOS20-02971 ✓

DNA Profiling Results:

STR Marker	Allele 1	Allele 2
TGLA227	Not Detected	
BM2113	135	141
TGLA053	Not Detected	
ETH10	213	217
ILSTS011	268	268
SPS113	141	151
RM067	90	102
TGLA126	113	119
TGLA122	147	151
INRA023	202	206

STR Marker	Allele 1	Allele 2
BM1818	264	266
ETH003	115	121
ETH225	158	158
BM1824	180	188
SPS115	248	260
CSRM060	100	102
MGTG4B	135	149
CSSM066	199	199
ILSTS006	Not Detected	

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.

Ms Miscna Fraser
ZooOmics™ Manager

24 April 2020

Date

Dr Christiaan Labuschagne
Genomics Manager

24 April 2020

Date

**See disclaimer on reverse side





Tel:

071 493 21 37

Email:

info@ZooOmics.co.za

Physical Address:

525 Justice Mahomed Str, Muckleneuk, Pretoria 0002

Postal Address:

PO Box 14356, Hatfield, Pretoria 0028

DNA PROFILE CERTIFICATE

General Information:

Test Animal	
ANIMAL ID/NAME	DO170102
MICROCHIP NUMBER	Not Provided
SPECIES	CATTLE
GENDER	Male
OWNER	FM DE JAGER
LAB. NO	ZOBOS20-02972 ✓

DNA Profiling Results:

STR Marker	Allele 1	Allele 2
TGLA227	Not Detected	
BM2113	125	137
TGLA053	Not Detected	
ETH10	209	211
ILSTS011	Not Detected	
SPS113	Not Detected	
RM067	92	96
TGLA126	Not Detected	
TGLA122	137	147
INRA023	206	208

STR Marker	Allele 1	Allele 2
BM1818	Not Detected	
ETH003	103	121
ETH225	148	159
BM1824	178	180
SPS115	Not Detected	
CSRM060	92	92
MGTG4B	139	149
CSSM066	197	199
ILSTS006	Not Detected	

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.

Ms Mischá Fraser
ZooOmics™ Manager

24 April 2020

Date

Dr Christiaan Labuschagne
Genomics Manager

24 April 2020

Date

**See disclaimer on reverse side

ISAG

Institutional Member

DNA PROFILE CERTIFICATE

General Information:

Test Animal	
ANIMAL ID/NAME	DO170138
MICROCHIP NUMBER	Not Provided
SPECIES	CATTLE
GENDER	Male
OWNER	FM DE JAGER
LAB. NO	ZOBOS20-02973 ✓

DNA Profiling Results:

STR Marker	Allele 1	Allele 2
TGLA227	Not Detected	
BM2113	139	141
TGLA053	Not Detected	
ETH10	213	213
ILSTS011	Not Detected	
SPS113	Not Detected	
RM067	90	96
TGLA126	113	119
TGLA122	137	161
INRA023	208	214

STR Marker	Allele 1	Allele 2
BM1818	262	266
ETH003	117	123
ETH225	142	142
BM1824	182	182
SPS115	248	252
CSRM060	100	102
MGTG4B	137	145
CSSM066	181	185
ILSTS006	Not Detected	

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.



Ms Mircna Fraser
ZooOmics™ Manager

24 April 2020

Date



Dr Christiaan Labuschagne
Genomics Manager

24 April 2020

Date



Tel:
Email:
Physical Address:
Postal Address:

071 493 21 37
info@ZooOmics.co.za
525 Justice Mahomed Str, Muckleneuk, Pretoria 0002
PO Box 14356, Hatfield, Pretoria 0028

DNA PROFILE CERTIFICATE

General Information:

Test Animal	
ANIMAL ID/NAME	DO170141
MICROCHIP NUMBER	Not Provided
SPECIES	CATTLE
GENDER	Male
OWNER	FM DE JAGER
LAB. NO	ZOBOS20-02974 ✓

DNA Profiling Results:

STR Marker	Allele 1	Allele 2
TGLA227	Not Detected	
BM2113	141	143
TGLA053	Not Detected	
ETH10	211	213
ILSTS011	261	261
SPS113	141	151
RM067	94	102
TGLA126	113	119
TGLA122	137	137
INRA023	208	214

STR Marker	Allele 1	Allele 2
BM1818	266	266
ETH003	103	121
ETH225	142	150
BM1824	180	188
SPS115	256	256
CSRM060	102	104
MGTG4B	135	137
CSSM066	181	199
ILSTS006	286	292

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.

Ms Miscna Fraser
ZooOmics™ Manager

24 April 2020

Date

Dr Christiaan Labuschagne
Genomics Manager

24 April 2020

Date

**See disclaimer on reverse side

ISAG

Institutional Member

DNA PROFILE CERTIFICATE

General Information:

Test Animal	
ANIMAL ID/NAME	DO170149
MICROCHIP NUMBER	Not Provided
SPECIES	CATTLE
GENDER	Male
OWNER	FM DE JAGER
LAB. NO	ZOBOS20-02975✓

DNA Profiling Results:

STR Marker	Allele 1	Allele 2
TGLA227	Not Detected	
BM2113	131	141
TGLA053	Not Detected	
ETH10	213	219
ILSTS011	263	268
SPS113	140	153
RM067	90	98
TGLA126	115	115
TGLA122	143	167
INRA023	206	206

STR Marker	Allele 1	Allele 2
BM1818	262	268
ETH003	103	117
ETH225	140	158
BM1824	182	188
SPS115	254	256
CSRM060	102	104
MGTG4B	141	145
CSSM066	185	185
ILSTS006	293	293

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.



Ms Mischia Fraser
 ZooOmics™ Manager

24 April 2020

Date



Dr Christiaan Labuschagne
 Genomics Manager

24 April 2020

Date