



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	ATR220105
BREED	Angus
SPECIES	Cattle
GENDER	Male
OWNER	AJ Tack
LAB. NO	ZOCA2023-43772

DNA Profiling Results:

STR Marker	Allele 1	Allele 2
TGLA227	81	81
BM2113	135	135
TGLA053	Not Detected	
ETH10	217	221
ILSTS011	266	268
SPS113	141	153
RM067	Not Detected	
TGLA126	121	123
TGLA122	151	151
INRA023	200	208

STR Marker	Allele 1	Allele 2
BM1818	266	268
ETH003	117	121
ETH225	144	150
BM1824	178	180
SPS115	248	252
CSRM060	100	102
MGTG4B	135	135
CSSM066	187	189
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.

Dr Christiaan Labuschagne
Genomics Manager

07 February 2023

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	ATR220006
BREED	Angus
SPECIES	Cattle
GENDER	Female
OWNER	AJ Tack
LAB. NO	ZOCA2023-43770

DNA Profiling Results:

STR Marker	Allele 1	Allele 2
TGLA227	81	93
BM2113	125	135
TGLA053	Not Detected	
ETH10	215	217
ILSTS011	266	266
SPS113	142	151
RM067	92	98
TGLA126	115	117
TGLA122	143	151
INRA023	206	208

STR Marker	Allele 1	Allele 2
BM1818	270	270
ETH003	117	125
ETH225	144	150
BM1824	178	180
SPS115	254	254
CSRM060	102	102
MGTG4B	135	143
CSSM066	187	187
ILSTS006	288	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.

Dr Christiaan Labuschagne
Genomics Manager

07 February 2023

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 PARENTAGE CERTIFICATE

Test Animal

Animal ID/Name	ATR220015
Breed	Angus
DNA Profile Certificate Number	ZOCA2023-43771-DC

qualifies as the offspring of

Male

Animal ID/Name	RCM190061
Breed	Angus
DNA Profile Certificate Number	ZOCA2022-31409-DC

&

Female

Animal ID/Name	Not Applicable
Breed	Not Applicable
DNA Profile Certificate Number	Not Applicable

Based on the results from genetic profiles of the individually listed animals after categorical allocation of the supplied biological samples. Allocation is based on a confidence level of 95% (based on the population tested) and ≤1 mismatched marker.

Dr Christiaan Labuschagne
Genomics Manager

07 February 2023
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 PARENTAGE CERTIFICATE

Test Animal

Animal ID/Name	ATR220027
Breed	Angus
DNA Profile Certificate Number	ZOCA2023-43769-DC

qualifies as the offspring of

Male

Animal ID/Name	ZDW180015
Breed	Angus
DNA Profile Certificate Number	ZOCA2022-31408-DC

&

Female

Animal ID/Name	Not Applicable
Breed	Not Applicable
DNA Profile Certificate Number	Not Applicable

Based on the results from genetic profiles of the individually listed animals after categorical allocation of the supplied biological samples. Allocation is based on a confidence level of 95% (based on the population tested) and ≤1 mismatched marker.

Dr Christiaan Labuschagne
Genomics Manager

07 February 2023
Date

****See disclaimer on reverse side**

DNA PROFILE CERTIFICATE

General Information:

Test Animal	
ANIMAL ID/NAME	ATR220009
BREED	Angus
SPECIES	Cattle
GENDER	Female
OWNER	
LAB. NO	ZOCA2023-43773

DNA Profiling Results:

STR Marker	Allele 1	Allele 2
TGLA227	81	97
BM2113	125	135
TGLA053	Not Detected	
ETH10	221	223
ILSTS011	266	268
SPS113	147	153
RM067	90	102
TGLA126	115	121
TGLA122	151	151
INRA023	200	206

STR Marker	Allele 1	Allele 2
BM1818	258	266
ETH003	117	117
ETH225	144	146
BM1824	178	182
SPS115	248	252
CSRM060	100	100
MGTG4B	135	143
CSSM066	187	189
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.



Dr Christiaan Labuschagne
Genomics Manager

07 February 2023

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	ATR220015
BREED	Angus
SPECIES	Cattle
GENDER	Female
OWNER	AJ Tack
LAB. NO	ZOCA2023-43771

DNA Profiling Results:

STR Marker	Allele 1	Allele 2
TGLA227	93	97
BM2113	125	133
TGLA053	Not Detected	
ETH10	217	217
ILSTS011	266	268
SPS113	141	141
RM067	90	102
TGLA126	115	123
TGLA122	151	151
INRA023	202	208

STR Marker	Allele 1	Allele 2
BM1818	270	270
ETH003	117	119
ETH225	148	150
BM1824	182	188
SPS115	248	254
CSRM060	100	100
MGTG4B	135	135
CSSM066	183	197
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.

Dr Christiaan Labuschagne
Genomics Manager

07 February 2023

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 PARENTAGE CERTIFICATE

Test Animal

Animal ID/Name	ATR220105
Breed	Angus
DNA Profile Certificate Number	ZOCA2023-43772-DC

qualifies as the offspring of

Male

Animal ID/Name	RCM180110
Breed	Angus
DNA Profile Certificate Number	ZOCA2022-31410-DC

&

Female

Animal ID/Name	Not Applicable
Breed	Not Applicable
DNA Profile Certificate Number	Not Applicable

Based on the results from genetic profiles of the individually listed animals after categorical allocation of the supplied biological samples. Allocation is based on a confidence level of 95% (based on the population tested) and ≤ 1 mismatched marker.

Dr Christiaan Labuschagne
Genomics Manager

07 February 2023

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	ATR220027
BREED	Angus
SPECIES	Cattle
GENDER	Female
OWNER	AJ Tack
LAB. NO	ZOCA2023-43769

DNA Profiling Results:

STR Marker	Allele 1	Allele 2
TGLA227	81	81
BM2113	125	125
TGLA053	Not Detected	
ETH10	217	217
ILSTS011	268	268
SPS113	142	153
RM067	96	98
TGLA126	113	115
TGLA122	137	151
INRA023	208	214

STR Marker	Allele 1	Allele 2
BM1818	262	270
ETH003	117	117
ETH225	148	158
BM1824	178	188
SPS115	252	254
CSRM060	102	104
MGTG4B	135	143
CSSM066	187	187
ILSTS006	290	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.

Dr Christiaan Labuschagne
Genomics Manager

07 February 2023

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 PARENTAGE CERTIFICATE

Test Animal

Animal ID/Name	ATR220006
Breed	Angus
DNA Profile Certificate Number	ZOCA2023-43770-DC

qualifies as the offspring of

Male

Animal ID/Name	ZDW180015
Breed	Angus
DNA Profile Certificate Number	ZOCA2022-31408-DC

&

Female

Animal ID/Name	Not Applicable
Breed	Not Applicable
DNA Profile Certificate Number	Not Applicable

Based on the results from genetic profiles of the individually listed animals after categorical allocation of the supplied biological samples. Allocation is based on a confidence level of 95% (based on the population tested) and ≤ 1 mismatched marker.

Dr Christiaan Labuschagne
Genomics Manager

07 February 2023
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 PARENTAGE CERTIFICATE

Test Animal

Animal ID/Name	ATR220009
Breed	Angus
DNA Profile Certificate Number	ZOCA2023-43773-DC

qualifies as the offspring of

Male

Animal ID/Name	RCM180110
Breed	Angus
DNA Profile Certificate Number	ZOCA2022-31410-DC

&

Female

Animal ID/Name	Not Applicable
Breed	Not Applicable
DNA Profile Certificate Number	Not Applicable

Based on the results from genetic profiles of the individually listed animals after categorical allocation of the supplied biological samples. Allocation is based on a confidence level of 95% (based on the population tested) and ≤ 1 mismatched marker.

Dr Christiaan Labuschagne
Genomics Manager

07 February 2023

Date

****See disclaimer on reverse side**