

CERTIFICATE OF GENETIC ANALYSIS - DOG**Owner:**

Elisabeth Beccaro, 109 Blandford road, Noordhang, Randburg, 2188, Gauteng, South Africa

GENETIC TEST: Ridge predisposition

Name:	AMBERHALL CINTSANGU
Breed:	Rhodesian Ridgeback
Sex:	Male
Date of Birth:	04.05.2019
Registration number:	ZA008321B19
Chip:	985111001217775
Sample / ID / Lab ID:	blood / Cintsa / BC9
Sample received:	13.01.2023

RESULT: *R / r (Ridge / ridgeless)***Result interpretation:**

R / R (Ridge / Ridge) - A ridge causing variant (133 kb duplication) was detected in two copies in tested individual. The sire/dam always passes one to their offspring. Ridge is a dominant trait, so their puppies are expected to have ridge in most cases.

R / r (Ridge / ridgeless) - A ridge causing variant (133 kb duplication) was detected in one copy in tested individual. The sire/dam has ridge in most cases but is a ridgelessness carrier. When mated to another R / r individual, statistically 25 % of puppies will be born ridgeless.

r / r (ridgeless / ridgeless) - no ridge causing variant (133 kb duplication) was detected in tested individual and is expected to be phenotypically ridgeless.

Authorised by:

Miroslav Hornak, Ph.D
Head of Laboratory



GenoCan
genetic laboratory
Brno, Czech Republic

Date: 17.1.2023

Primary sample: The animal identity was verified and sample taken by veterinarian (RANT EN DAL ANIMAL HOSPITAL).

Test accuracy: The genetic test detects the 133 kb duplication involving genes (FGF3, FGF4, FGF19 and ORAOV1) on chromosome 18. The accuracy of the analysis is >97 %.

CERTIFICATE OF GENETIC ANALYSIS - DOG**Owner:**

Elisabeth Beccaro, 109 Blandford road, Noordhang, Randburg, 2188, Gauteng, South Africa

GENETIC TEST: Juvenile Myoclonic Epilepsy (JME)

Name:	AMBERHALL CINTSANGU
Breed:	Rhodesian Ridgeback
Sex:	Male
Date of Birth:	04.05.2019
Registration number:	ZA008321B19
Chip:	985111001217775
Sample / ID / Lab ID:	blood / Cintsa / BC9
Sample received:	13.01.2023

RESULT: N / N (clear)**Result interpretation:**

N / N (clear) - the mutation was not detected in *DIRAS1* gene in the tested individual.

P / N (carrier) - the mutation was detected in one copy of *DIRAS1* gene in the tested individual. The sire/dam is a healthy carrier. There is a statistical 50 % risk of passing mutation to the offspring.

P / P (affected) - the mutation was detected in both copies of *DIRAS1* gene. The individual is affected or may develop the genetic disease.

Authorised by:

Miroslav Homak, Ph.D
Head of Laboratory



GenoCan
genetic laboratory
Brno, Czech Republic

Date: 17.1.2023

Primary sample: The animal identity was verified and sample taken by veterinarian (RANT EN DAL ANIMAL HOSPITAL).

Test accuracy: The ordered genetic test detects the mutation c.564_567delAGAC in *DIRAS1* gene. The accuracy of the analysis is >98 %.

CERTIFICATE OF GENETIC ANALYSIS - DOG**Owner:**

Elisabeth Beccaro, 109 Blandford road, Noordhang, Randburg, 2188, Gauteng, South Africa

GENETIC TEST: Malignant Hyperthermia (MH)

Name:	AMBERHALL CINTSANGU
Breed:	Rhodesian Ridgeback
Sex:	Male
Date of Birth:	04.05.2019
Registration number:	ZA008321B19
Chip:	985111001217775
Sample / ID / Lab ID:	blood / Cintsa / BC9
Sample received:	13.01.2023

RESULT: N / N (clear)**Result interpretation:**

N / N (clear) - the mutation was not detected in *RYS1* gene in the tested individual. The sire/dam is not at risk of developing the disease.

P / N (affected) - the mutation was detected in one copy of *RYS1* gene in the tested individual. The mutation is dominantly inherited, so the sire/dam may develop symptoms of the disease.

Authorised by:

Miroslav Homak, Ph.D
Head of Laboratory



GenoCan
genetic laboratory
Brno, Czech Republic

Date: 17.1.2023

Primary sample: The animal identity was verified and sample taken by veterinarian (RANT EN DAL ANIMAL HOSPITAL).

Test accuracy: The ordered genetic test detects the mutation c.1640T>C in *RYS1* gene. The accuracy of the analysis is >98 %.

CERTIFICATE OF GENETIC ANALYSIS - DOG**Owner:**

Elisabeth Beccaro, 109 Blandford road, Noordhang, Randburg, 2188, Gauteng, South Africa

GENETIC TEST: Degenerative Myelopathy (DM)

Name:	AMBERHALL CINTSANGU
Breed:	Rhodesian Ridgeback
Sex:	Male
Date of Birth:	04.05.2019
Registration number:	ZA008321B19
Chip:	985111001217775
Sample / ID / Lab ID:	blood / Cintsa / BC9
Sample received:	13.01.2023

RESULT: N / N (clear)**Result interpretation:**

N / N (clear) - mutation in exon 2 of *SOD1* gene was not detected in the tested individual.

P / N (carrier) - mutation in exon 2 was detected in one copy of *SOD1* gene in the tested individual. The sire/dam is a healthy carrier. There is a statistical 50 % risk of passing mutation to the offspring.

P / P (affected) - mutation in exon 2 was detected in both copies of *SOD1* gene. The individual is affected or may develop the genetic disease.

Authorised by:

Miroslav Homak, Ph.D
Head of Laboratory



GenoCan
genetic laboratory
Brno, Czech Republic

Date: 17.1.2023

Primary sample: The animal identity was verified and sample taken by veterinarian (RANT EN DAL ANIMAL HOSPITAL).

Test accuracy: The ordered genetic test detects mutations in exon 2 of the *SOD1* gene. The accuracy of the analysis is >98 %. The test might be performed in a partner laboratory.

CERTIFICATE OF GENETIC ANALYSIS - DOG**Owner:**

Elisabeth Beccaro, 109 Blandford road, Noordhang, Randburg, 2188, Gauteng, South Africa

GENETIC TEST: D-locus (Dilution, d1 allele)

Name:	AMBERHALL CINTSANGU
Breed:	Rhodesian Ridgeback
Sex:	Male
Date of Birth:	04.05.2019
Registration number:	ZA008321B19
Chip:	985111001217775
Sample / ID / Lab ID:	blood / Cintsa / BC9
Sample received:	13.01.2023

RESULT: *D / D (no variant)***Result interpretation:**

D / D (no variant) - the variant was not detected in *MLPH* gene in the tested individual. The sire/dam does not carry the colour dilution allele.

D / d1 (carrier) - the variant was detected in one copy of *MLPH* gene in the tested individual. The sire/dam is a carrier of the colour dilution allele, but does not show colour dilution.

d1 / d1 (homozygous for the variant) - the variant was detected in both copies of *MLPH* gene in the tested individual. The sire/dam is most likely to show the colour dilution.

Authorised by:



Miroslav Homak, Ph.D
Head of Laboratory



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genetic laboratory
Brno, Czech Republic

Date: 17.1.2023

Primary sample: The animal identity was verified and sample taken by veterinarian (RANT EN DAL ANIMAL HOSPITAL).

Test accuracy: The ordered genetic test detects the variant c.-22G>A in *MLPH* gene. The accuracy of the analysis is >98 %.

CERTIFICATE OF GENETIC ANALYSIS - DOG**Owner:**

Elisabeth Beccaro, 109 Blandford road, Noordhang, Randburg, 2188, Gauteng, South Africa

GENETIC TEST: B-locus (Brown)

Name:	AMBERHALL CINTSANGU
Breed:	Rhodesian Ridgeback
Sex:	Male
Date of Birth:	04.05.2019
Registration number:	ZA008321B19
Chip:	985111001217775
Sample / ID / Lab ID:	blood / Cintsa / BC9
Sample received:	13.01.2023

RESULT: B / bs (carrier)**Result interpretation:**

B / B (no variant) - the tested individual does not carry brown color disposition.

B / bc or B / bs or B / bd (carrier) - the tested individual is a carrier of brown disposition.

bc / bc or bd / bd or bs / bs (homozygous for the variant) - the individual should be brown for typical parts in the breed.

bc / bs or bc / bd or bd / bs (compound heterozygote) - the individual should be brown, but note that it is not possible to describe the genotype for the B-locus without testing the parents, as it is not possible to distinguish whether the variants are on one or both copies of the gene (e.g. it is not possible to distinguish B/bc+bs from bc/bs).

Authorised by:
Miroslav Homak, Ph.D
Head of Laboratory**Date: 17.1.2023** **GenoCan**
genetic laboratory
Brno, Czech Republic

Primary sample: The animal identity was verified and sample taken by veterinarian (RANT EN DAL ANIMAL HOSPITAL).

Test accuracy: The ordered genetic test detects variants c.991C>T (bs), c.1033_1036delCCT (bd) and c.121T>A (bc) in TYRP1 gene. The accuracy of the analysis is >98 %.

CERTIFICATE OF GENETIC ANALYSIS - DOG**Owner:**

Elisabeth Beccaro, 109 Blandford road, Noordhang, Randburg, 2188, Gauteng, South Africa

GENETIC TEST: Hemophilia B (HemB)

Name:	AMBERHALL CINTSANGU
Breed:	Rhodesian Ridgeback
Sex:	Male
Date of Birth:	04.05.2019
Registration number:	ZA008321B19
Chip:	985111001217775
Sample / ID / Lab ID:	blood / Cintsa / BC9
Sample received:	13.01.2023

RESULT: Xn / Y (clear)**Result interpretation:**

The disease is sex-linked, the clinical signs depend on the sex of the tested individual:

In females:**Xn / Xn (clear)** - the mutation was not detected in *F9* gene in the female. There is no risk of disease in the tested individual and transmission to offspring.**Xp / Xn (carrier)** - the mutation was detected in one copy of *F9* gene. Statistically 50 % of the offspring (males) will be at risk of developing the disease.**Xp / Xp (affected)** - the mutation was detected on both copies of *F9* gene in the female. The individual is affected or may develop the genetic disease.**In males:****Xn / Y (clear)** - the mutation was not detected in *F9* gene in the male. The tested individual is not at risk of developing the disease.**Xp / Y (affected)** - the mutation was detected in *F9* gene in the male. The individual is affected or may develop the genetic disease.**Authorised by:**
Miroslav Homak, Ph.D
Head of Laboratory

Brno, Czech Republic**Date: 17.1.2023****Primary sample:** The animal identity was verified and sample taken by veterinarian (RANT EN DAL ANIMAL HOSPITAL).**Test accuracy:** The ordered genetic analysis tests the mutation c.731G>A (OMIA 000438-9615) ± 25 base pairs in *F9* gene. The accuracy of the analysis is >98 %.

CERTIFICATE OF GENETIC ANALYSIS - DOG**Owner:**

Elisabeth Beccaro, 109 Blandford road, Noordhang, Randburg, 2188, Gauteng, South Africa

GENETIC TEST: Early Onset Adult Deafness (EOAD)

Name:	AMBERHALL CINTSANGU
Breed:	Rhodesian Ridgeback
Sex:	Male
Date of Birth:	04.05.2019
Registration number:	ZA008321B19
Chip:	985111001217775
Sample / ID / Lab ID:	blood / Cintsa / BC9
Sample received:	13.01.2023

RESULT: N / N (clear)**Result interpretation:**

N / N (clear) - the mutation was not detected in *EPS8L2* gene in the tested individual.

P / N (carrier) - the mutation was detected in one copy of *EPS8L2* gene in the tested individual. The sire/dam is a healthy carrier. There is a statistical 50 % risk of passing mutation to the offspring.

P / P (affected) - the mutation was detected in both copies of *EPS8L2* gene. The individual is affected or may develop the genetic disease.

Authorised by:

Miroslav Homak, Ph.D
Head of Laboratory

Brno, Czech Republic

Date: 17.1.2023

Primary sample: The animal identity was verified and sample taken by veterinarian (RANT EN DAL ANIMAL HOSPITAL).

Test accuracy: The ordered genetic test detects the mutation chr18:g.25868739-25868751del in *EPS8L2* gene. The accuracy of the analysis is >98 %.