

# Inqaba Biotechnical Industries (Pty) Ltd Animal Genetics Division

ZO2023/5532/20230428/#44587

Co. Reg. No: 2001/011245/07

VAT No: 4150197251

### Ichthyosis (Golden Retriever Type 1)

Report No:

Client Name: Lauriaan Morton (LAU002)

Client Address: Lauriaan Morton (LAU002)

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Phone: 0768783024

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Profile: DG2023/47485 Species: Canis lupus familiaris / Canine / Dog

Name: Pawshappyness Kiara of Mortonouro Microchip #: 981 020 002 401 782

Breed: Golden Retriever Registration #: ZA002971B23

Test: [PNPLA1] Ichthyosis (Golden Retriever Type 1)

Results: c.1451\_1453delTACTACTA DEL/DEL Affected

Sample Type: Whole Blood (EDTA) Extraction Method: DNA Extraction: D4069 Test Type: Genetic Health

### [PNPLA1] Ichthyosis (Golden Retriever Type 1)

Ichthyoses are a group of inherited cornification skin disorders characterized by generalized dry skin, scaling and hyperkeratosis. Signs and symptoms may present in affected dogs from as early as 1-2 weeks of age, and may include flaky skin and a scruffy haircoat when compared to normal littermates. The skin of the abdomen may appear reddened, wrinkled, and covered by light brown scales. Scaled skin may become red-brown with brown scales adhered to the skin, and white to tan coloured scales throughout the coat. Affected dogs may also develop thickened footpads, and are at an increased risk for infections of the skin, ears, and footpads.

This test detects the presence or absence of the indelACC/TATACTA mutation in the PNPLA1 gene associated with ichthyosis Type 1 of Golden Retrievers.

Ichthyosis is inherited as an autosomal recessive trait and requires two mutant alleles for an individual to be affected.

References: Grall et al 2012. PNPLA1 mutations cause autosomal recessive congenital ichthyosis in golden retriever dogs and humans. Nature Genetics 44, pp140.

It is the sender's responsibility to ensure the correctness of the information accompanying the samples. In no event shall Inqaba Biotechnical Industries (Pty) Ltd or its divisions be held liable for indirect, substantial or secondary damages of any kind. Results are usually made available within 7-14 days of receipt of samples. Please note that results are only released subject to payment.

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#### Whatever is contained in this report is subject to the following:

This report does not disregard the existence of any rare or unknown variant within this gene or other gene(s) that may results in the same or similar trait. Multiple mutations and/or gene(s) may contribute to the overall trait observed.

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

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