

# Inqaba Biotechnical Industries (Pty) Ltd Animal Genetics Division

ZO2024/8065/20240925/#79280

Co. Reg. No: 2001/011245/07

VAT No: 4150197251

### Ichthyosis (Golden Retriever Type 1)

Report No:

Client Name: Arnel Sauer (ARS001)

Client Address: Arnel Sauer (ARS001)

359C Valley Road North Riding AH Roodepoort, Gauteng

South Africa

Phone: 083 601 2939

Email: arnel@goldens.co.za

Profile: DG2024/76526 Species: Canis lupus familiaris / Canine / Dog

Name: Pink Girl\_Myah Microchip #: 900141000066553

Breed: Golden Retriever

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

Results: c.1451\_1453delTACTACTA WT/WT Clear

Sample Type: FTA Card Extraction Method: FTA Card Purification 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.

PostNet Suite #017, Private bag X12, Menlo Park, 0102, South Africa • Phone: +27 71 493 21 37 • Fax: +27 86 677 84 09 Email: info@zooomics.co.za • Website: http://www.zooomics.co.za

Page: 1 / 2



## Inqaba Biotechnical Industries (Pty) Ltd Animal Genetics Division

Co. Reg. No: 2001/011245/07

VAT No: 4150197251

#### Disclaimer:

#### 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.

Inqaba Biotechnical Industries Pty Ltd and the divisions thereof (Registration number: 2001/011245/07) accepts that the biological specimen(s) provided, originates from the relevant animal(s) indicated on supporting documents received and does not accept responsibility for the downstream effects of incorrect information provided.

It is the responsibility of the client that all biological samples are available at submission or previously 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.

Inqaba Biotechnical Industries Pty Ltd and the divisions thereof accepts that all genetic profiles and/or samples from external sources are correctly labelled and accurate. Inqaba Biotechnical Industries Pty Ltd and the divisions thereof does not accept responsibility for the effect of any inaccuracies of submitted DNA profiles on the analysis and results.

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.

This document is solely for the use of the addressee and only in connection for the purpose set out in this document. Inqaba Biotechnical Industries Pty Ltd and the divisions thereof do not assume liability or responsibility to any third party to which this document is disclosed or otherwise made available.

Nothing in this document should be construed as advice to proceed or not to proceed with any specific course of action, as it was not prepared for that purpose.

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 reserve the right to decline testing of samples.

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

PostNet Suite #017, Private bag X12, Menlo Park, 0102, South Africa • Phone: +27 71 493 21 37 • Fax: +27 86 677 84 09 Email: info@zooomics.co.za • Website: http://www.zooomics.co.za

Page: 2 / 2