



PennGen Laboratories | School of Veterinary Medicine | University of Pennsylvania

3900 Delancey Street, Room 4022, Philadelphia, PA 19104

Lab: 215-898-5703 | PennVetDNA@lists.upenn.edu | <http://research.vet.upenn.edu/penngen>

DNA Testing: Owner/Patient Report 2/22/2017

Submitter Information

Owner's Name Tracy Brown

Patient Information

Official Name Ch. Armada's Busting On The Scene
Call Name Buster **DOB** 4/21/2014 (2 Years 10 Months)
Breed Portuguese Water Dog **Sex** Male (Intact)
Registration # BG553063 **Tattoo#** LUJ 10B

Testing Information

Submission ID 15871
Testing Date 2/22/2017 **Processed By** Dr. Paula Henthorn
Test Juvenile Dilated Cardiomyopathy (JDCM) Linked Marker-DNA [Fresh EDTA blood]

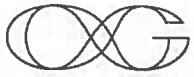
Result Information

Genotype 1-1 (Homozygous Normal Markers)
Phenotype Probable Normal (Healthy)
Interpretation 1-1 (Probable Normal) dogs are not expected to develop JDCM, nor are they expected to pass a JDCM-causing gene to their offspring. Due to the inherent nature of linked marker tests, there is a slight chance that a pattern 1-1 dog is a carrier of JDCM and an even smaller chance that a pattern 1-1 dog is affected.

Sincerely,

Paula Henthorn, PhD
Professor of Medical Genetics

Michael Raducha, BS
Research Specialist



OPTIGEN[®] LLC

for the genetic advantage

Test Report

Scott McQueen
2803 Coughlan Green SW
Edmonton, Alberta T6W 3P1
Canada

Optigen Accession #: 17-696
Report issued for: **Buster**

OptiGen Test Certificate

Optigen Accession #: 17-696

Test Completed: 02/20/2017
Report Issued: 02/20/2017

Test Performed: GM1

Result: Normal
Sample Type: Blood

Registered Name: Ch. Armada's Busting On The Scene

Reg#: BG553063

Breed: Portuguese Water Dog

ID#: LUJ 10B

Sex: Male

Date of Birth: April 21, 2014

Owner(s):

Scott McQueen



Susan Pease Kelling
OptiGen Authorized Signature

www.optigen.com

Test Results: Genotype of your dog is: NORMAL/CLEAR

Risk for developing GM1: This dog will not develop the form of storage disorder caused by the GM1 mutation.

Significance for breeding: Genetically Normal/Clear dogs can be bred to any dog and will produce no pups affected with disease due to the GM1 mutation.

Other forms of storage disease(s): Please note that the GM1 DNA test is only able to identify the single mutation currently known as GM1 in the PWD. DNA tests do not replace the importance of regular veterinary clinical assessments of breeding stock.

For further information, please consult the OptiGen website at www.optigen.com

International DNA Based Genetic Database: To register this result with OFA, make a copy, sign below, mail WITH FEE, to OFA, 2300 E. Nifong Blvd, Columbia, MO 65201-3856 or FAX to 573-875-5073. www.oifa.org

I hereby certify that the sample submitted was of the animal described on this application. I authorize the OFA to release all information on the test results thus placing the results in the public domain and I hereby release OFA from any and all liability associated with the release of test information.

Signature of owner or authorized representative: _____

Cornell Business & Technology Park

tel: 607.257.0301

fax: 607.257.0353

767 Warren Road, Suite 300, Ithaca, NY 14850

email: genetest@optigen.com

web: www.optigen.com

ORTHOPEDIC FOUNDATION FOR ANIMALS, INC.



ARMADA'S BUSTING ON THE SCENE, CH

registered name

BG553063
registration no.

PORTUGUESE WATER DOG

breed

M
sex

17-696

film/vest/lab #

4/21/2014
date of birth

LUJ 10B

tattoo/microchip/DNA profile

33
age at evaluation in months

1831178

application number

PW-GM1-3441/33M-PI
O.F.A. NUMBER

6/20/2017
date of report

RESULTS:
GM1 GANGLIOSIDOSIS: GENOTYPICALLY NORMAL

These results are based on the laboratory report from OPTIGEN and the owner's certification that the sample provided was from the animal described above. The OFA registers these lab results, but cannot warrant the accuracy of the lab results.

owner
SCOTT MCQUEEN
2803 COUGHLAN GREEN SW
EDMONTON, AB T6W3P1
CANADA

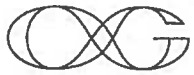
G.G. Keller, D.V.M., M.S., DACVR
CHIEF OF VETERINARY SERVICES



A Not-For-Profit Organization

This number issued with the right to correct or revoke by the Orthopedic Foundation for Animals.

www.ofa.org



OPTIGEN® LLC

for the genetic advantage

Test Report

Scott McQueen
2803 Coughlan Green SW
Edmonton, Alberta T6W 3P1
Canada

Optigen Accession #: 17-696
Report issued for: Buster

OptiGen Test Certificate

Optigen Accession #: 17-696

Test Completed: 02/15/2017
Report Issued: 02/15/2017

Test Performed: Curly Hair Test

Result: Carrier
Sample Type: Blood

Registered Name: Ch. Armada's Busting On The Scene

Reg#: BG553063

Breed: Portuguese Water Dog

ID#: LUJ 10B

Sex: Male

Date of Birth: April 21, 2014

Owner(s):

Scott McQueen



Susan Pearson Kelling
OptiGen Authorized Signature

www.optigen.com

Test Results: Genotype of this dog is CARRIER of one copy of the KRT71 mutation and one copy of the normal gene.

Interpretation of test result: this dog will most likely have no tight curls due to the mutation but it may have loose curls or waves due to incomplete dominance of the mutation or due to effects of other genes.

Significance for breeding: Carrier dogs transmit the KRT71 mutation to about 50% of its offspring.

For further information, please consult the OptiGen website at www.optigen.com

International DNA Based Genetic Database: To register this result with OFA, make a copy, sign below, mail WITH FEE, to OFA, 2300 E. Nifong Blvd, Columbia, MO 65201-3856 or FAX to 573-875-5073. www.ofa.org
I hereby certify that the sample submitted was of the animal described on this application. I authorize the OFA to release all information on the test results thus placing the results in the public domain and I hereby release OFA from any and all liability associated with the release of test information.

Signature of owner or authorized representative: _____

Cornell Business & Technology Park

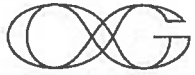
tel: 607.257.0301

fax: 607.257.0353

767 Warren Road, Suite 300, Ithaca, NY 14850

email: genetest@optigen.com

web: www.optigen.com



OPTIGEN® LLC

for the genetic advantage

Test Report

Scott McQueen
2803 Coughlan Green SW
Edmonton, Alberta T6W 3P1
Canada

Optigen Accession #: 17-696
Report issued for: **Buster**

OptiGen Test Certificate

Optigen Accession #: 17-696

Test Completed: 02/15/2017
Report Issued: 02/15/2017

Test Performed: **Improper Coat Test**

Result: **Normal**
Sample Type: **Blood**

Registered Name: **Ch. Armada's Busting On The Scene**

Reg#: **BG553063**

Breed: **Portuguese Water Dog**

ID#: **LUJ 10B**

Sex: **Male**

Date of Birth: **April 21, 2014**

Owner(s):

Scott McQueen



Susan Pease Kelling
OptiGen Authorized Signature

www.optigen.com

Test Results: Genotype of your dog is Normal for Improper Coat (IC)

Risk for having IC. This dog will never exhibit the Improper Coat that is detected by the IC13 DNA test. So far, this test is able to detect the only identified form of IC in the breed and is responsible for at least 95% of the IC cases. It is important to remember, however, that other infrequent genes also may determine IC and that this test is only reliable as a test for the presence or absence of this particular mutation.

Significance for breeding: Genetically Normal dogs can be bred to any dog and will produce no pups affected with the IC13 form of Improper Coat.

This interpretation is based on the test result of the DNA test for the specific mutation identified as causing the IC13 form of Improper Coat in Portuguese Water Dogs as of the date on this report.

For further information, please consult the OptiGen website at www.optigen.com

International DNA Based Genetic Database: To register this result with OFA, make a copy, sign below, mail WITH FEE, to OFA, 2300 E. Nifong Blvd, Columbia, MO 65201-3856 or FAX to 573-875-5073. www.ofa.org
I hereby certify that the sample submitted was of the animal described on this application. I authorize the OFA to release all information on the test results thus placing the results in the public domain and I hereby release OFA from any and all liability associated with the release of test information.

Signature of owner or authorized representative: _____

Cornell Business & Technology Park

tel: 607.257.0301

fax: 607.257.0353

767 Warren Road, Suite 300, Ithaca, NY 14850

email: genetest@optigen.com

web: www.optigen.com



OPTIGEN[®] LLC

for the genetic advantage

Test Report

Scott McQueen
2803 Coughlan Green SW
Edmonton, Alberta T6W 3P1
Canada

Optigen Accession #: 17-696
Report issued for: **Buster**

OptiGen Test Certificate

Optigen Accession #: 17-696

Test Completed: 02/16/2017
Report Issued: 02/16/2017

Test Performed: **prcd Mutation Test for PRA**

Result: **Normal**
Sample Type: **Blood**

Registered Name: **Ch. Armada's Busting On The Scene**

Reg#: **BG553063**

Breed: **Portuguese Water Dog**

ID#: **LUJ 10B**

Sex: **Male**

Date of Birth: **April 21, 2014**

Owner(s):

Scott McQueen



Susan Peasarkelline
OptiGen Authorized Signature

www.optigen.com

Test Results: Genotype of your dog is **NORMAL/CLEAR**.

Risk for developing prcd-PRA: This dog will never develop the prcd form of PRA (progressive rod-cone degeneration form of Progressive Retinal Atrophy). prcd-PRA is the most prevalent form of PRA in most breeds of dog but there are other forms of PRA that could occur in any breed.

DNA testing does not replace the value of routine eye exams.

Significance for breeding: Genetically Normal/Clear dogs can be bred to any dog and will produce no pups affected with the prcd form of PRA.

This interpretation is based on the test result of the DNA test for the specific mutation identified as causing the prcd form of PRA in Portuguese Water Dogs as of the date on this report.

For further information, please consult the OptiGen website at www.optigen.com. Note: The use of this test is patent protected and licensed to OptiGen. See http://www.optigen.com/opt9_patent.html for details.

International DNA Based Genetic Database: To register this result with OFA, make a copy, sign below, mail WITH FEE, to OFA, 2300 E. Nifong Blvd, Columbia, MO 65201-3856 or FAX to 573-875-5073. www.ofa.org

I hereby certify that the sample submitted was of the animal described on this application. I authorize the OFA to release all information on the test results thus placing the results in the public domain and I hereby release OFA from any and all liability associated with the release of test information.

Signature of owner or authorized representative: _____

Cornell Business & Technology Park

tel: 607.257.0301

fax: 607.257.0353

767 Warren Road, Suite 300, Ithaca, NY 14850

email: genetest@optigen.com

web: www.optigen.com

ORTHOPEDIC FOUNDATION FOR ANIMALS, INC.

ARMADA'S BUSTING ON THE SCENE, CH

registered name

PORTUGUESE WATER DOG

breed

17-6996

film/vest/lab #

LUJ 10B

tattoo/microchip/DNA profile

1831178

application number

6/20/2017

date of report

RESULTS:
prcd PROGRESSIVE RETINAL ATROPHY: CLEAR/NORMAL

These results are based on the laboratory report from OPTIGEN and the owner's certification that the sample provided was from the animal described above. The OFA registers these lab results, but cannot warrant the accuracy of the lab results.

owner
SCOTT MCQUEEN
2803 COUGHLAN GREEN SW
EDMONTON, AB T6W3P1
CANADA

BG553063
registration no.

M
sex

4/21/2014
date of birth

33

age at evaluation in months

PW-PRA3877/33M-PI
O.F.A. NUMBER

This number issued with the right to correct or revoke by the Orthopedic Foundation for Animals.



A Not-For-Profit Organization

G.G. Keller, D.V.M.

G.G. KELLER, D.V.M., M.S., DACVR
CHIEF OF VETERINARY SERVICES

www.ofa.org

ORTHOPEDIC FOUNDATION FOR ANIMALS, INC.



ARMADA'S BUSTING ON THE SCENE, CH

registered name

BG553063

registration no.

PORTUGUESE WATER DOG

breed

M

sex

4/21/2014

date of birth

33

age at evaluation in months



A Not-For-Profit Organization

LUJ10B

tattoo/microchip/DNA profile

1831178

application number

2/20/2017

date of report

RESULTS:

Based upon the radiograph submitted, the consensus was that no evidence of elbow dysplasia was recognized.

NORMAL

owner
SCOTT MCQUEEN
2803 COUGHLAN GREEN SW
EDMONTON, AB T6W3P1
CANADA

PW-EL3389M33-VPI
O.F.A. NUMBER
This number issued with the right to correct or
revoke by the Orthopedic Foundation for Animals.

G.G. Keller, DVM
G.G. KELLER, D.V.M., M.S., DACVR
CHIEF OF VETERINARY SERVICES

www.offa.org