embark

# DNA Test Report

## Dog Information

**Graham**
NAME

**Male**
SEX

**Poodle**
**Breed with variety:**
**56.5% Poodle (Standard)**
**43.5% Poodle (Small)**
BREED ANCESTRY

**March 20th, 2023**
DATE OF BIRTH

**n/a**
MICROCHIP

**American Kennel Club (AKC)**
REGISTRATION

**Jennifer Allen, Danielle Manire**
OWNER NAMES

**Canine Genetic Health Screen**
TEST

**April 18th, 2023**
TEST DATE

## BREED HEALTH TESTS

| DISEASE | GENE | GENOTYPE | RESULT | TESTING RECOMMENDED BY |
|---|---|---|---|---|
| Degenerative Myelopathy, DM | SOD1A | GG | Clear | |
| Neonatal Encephalopathy with Seizures, NEWS | ATF2 | TT | Clear | |
| Osteochondrodysplasia, Skeletal Dwarfism | SLC13A1 | NN | Clear | |
| Progressive Retinal Atrophy, prcd | PRCD Exon 1 | GG | Clear | |
| Von Willebrand Disease Type I, Type I vWD | VWF | GG | Clear | |
| Chondrodystrophy and Intervertebral Disc Disease, CDDY/IVDD, Type I IVDD | FGF4 - chr12 | N/I | 1 Variant | |
| GM2 Gangliosidosis | HEXB (Exon 3) | NN | Clear | |

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## INBREEDING AND DIVERSITY

| Genetic Diversity | RESULT | GENETIC RESULT |
|---|---|---|
| Coefficient Of Inbreeding | | 8% |
| MHC Class II - DLA DRB1 | | No Diversity |
| MHC Class II - DLA DQA1 and DQB1 | | No Diversity |

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## TRAIT TESTS (1/3)

| Coat Color | RESULT | GENETIC RESULT |
|---|---|---|
| E Locus (MC1R) | Can have a melanistic mask | $E^{m}e$ |
| K Locus (CBD103) | More likely to have a patterned haircoat | $k^{y}k^{y}$ |
| Intensity Loci | Any light hair likely yellow or tan | Intermediate Red Pigmentation |
| A Locus (ASIP) | Black/Brown and tan coat color pattern | $a^{t}a^{t}$ |
| D Locus (MLPH) | Dark areas of hair and skin are not lightened | DD |
| Cocoa (HPS3) | No co alleles, not expressed | NN |
| B Locus (TYRP1) | Brown hair and skin | bb |
| Saddle Tan (RALY) | Likely saddle tan patterned | NI |
| S Locus (MITF) | Likely flash, parti, piebald, or extreme white | spsp |
| M Locus (PMEL) | No merle alleles | mm |
| R Locus (USH2A) | Likely no impact on coat pattern | rr |

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## TRAIT TESTS (2/3)

| Coat Color | RESULT | GENETIC RESULT |
|---|---|---|
| H Locus (Harlequin) | No harlequin alleles | hh |

| Other Coat Traits | RESULT | GENETIC RESULT |
|---|---|---|
| Furnishings (RSPO2) | Likely furnished (mustache, beard, and/or eyebrows) | FF |
| Coat Length (FGF5) | Likely long coat | LhLh |
| Shedding (MC5R) | Likely light shedding | CC |
| Coat Texture (KRT71) | Likely curly coat | TT |
| Hairlessness (FOXI3) | Very unlikely to be hairless | NN |
| Hairlessness (SGK3) | Very unlikely to be hairless | NN |
| Oculocutaneous Albinism Type 2 (SLC45A2) | Likely not albino | NN |

| Other Body Features | RESULT | GENETIC RESULT |
|---|---|---|
| Muzzle Length (BMP3) | Likely medium or long muzzle | CC |
| Tail Length (T) | Likely normal-length tail | CC |
| Hind Dewclaws (LMBR1) | Unlikely to have hind dew claws | CC |

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## TRAIT TESTS (3/3)

| Other Body Features | RESULT | GENETIC RESULT |
|---|---|---|
| Blue Eye Color (ALX4) | Less likely to have blue eyes | NN |
| Back Muscling & Bulk, Large Breed (ACSL4) | Likely normal muscling | CC |

| Body Size | RESULT | GENETIC RESULT |
|---|---|---|
| Body Size (IGF1) | Smaller | II |
| Body Size (IGFR1) | Smaller | AA |
| Body Size (STC2) | Intermediate | TA |
| Body Size (GHR - E191K) | Intermediate | GA |
| Body Size (GHR - P177L) | Larger | CC |

| Performance | RESULT | GENETIC RESULT |
|---|---|---|
| Altitude Adaptation (EPAS1) | Normal altitude tolerance | GG |
| Appetite (POMC) | Normal food motivation | NN |