embark

# DNA Test Report

## Dog Information

| | |
|---|---|
| King's Ranch Florentias (Tias)<br>NAME | Female<br>SEX |
| Labrador Retriever<br>BREED ANCESTRY | March 21st, 2022<br>DATE OF BIRTH |
| American Kennel Club (AKC) SS33517110<br>REGISTRATION | n/a<br>MICROCHIP |

Cassandra J Day
OWNER NAME

Canine Genetic Health Screen
TEST

March 16th, 2023
TEST DATE

## BREED HEALTH TESTS

| DISEASE | GENE | GENOTYPE | RESULT | TESTING RECOMMENDED BY |
|---|---|---|---|---|
| Centronuclear Myopathy, CNM | PTPLA | NN | Clear | |
| Degenerative Myelopathy, DM | SOD1A | GG | Clear | |
| Exercise-Induced Collapse, EIC | DNM1 | GG | Clear | |
| Hereditary Nasal Parakeratosis, HNPK | SUV39H2 | GG | Clear | |
| Hyperuricosuria and Hyperuricemia or Urolithiasis, HUU | SLC2A9 (Exon 5) | GG | Clear | |
| Macular Corneal Dystrophy, MCD | CHST6 | CC | Clear | |
| Narcolepsy | HCRTR2 | AA | Clear | |
| Progressive Retinal Atrophy, prcd | PRCD Exon 1 | GG | Clear | |
| Pyruvate Kinase Deficiency | PKLR Exon 7 SNP Variant 1 | CC | Clear | |
| Skeletal Dysplasia 2, SD2 | COL11A2 | GG | Clear | |
| Achromatopsia | CNGA3 (Exon 7 Deletion) | NN | Clear | |
| Alexander Disease | GFAP (Exon 4) | GG | Clear | |
| Canine Elliptocytosis | SPTB Exon 30 | CC | Clear | |
| Congenital Myasthenic Syndrome, CMS | COLQ (Exon 14) | TT | Clear | |
| Golden Retriever Progressive Retinal Atrophy 2, GR-PRA2 | TTC8 Exon 8 | NN | Clear | |

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## BREED HEALTH TESTS

| DISEASE | GENE | GENOTYPE | RESULT | TESTING RECOMMENDED BY |
|---|---|---|---|---|
| Myotubular Myopathy 1, X-linked Myotubular Myopathy, XL-MTM | MTM1 (Exon 7) | CC | Clear | |
| Progressive Retinal Atrophy, crd4/cord1 | RPGRIP1 (Exon 2) | NN | Clear | |
| Stargardt Disease | ABCA4 Exon 28 | NN | Clear | |
| Ullrich-like Congenital Muscular Dystrophy | COL6A3 | GG | Clear | |

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## Dog Information

**King's Ranch Florentias (Tias)**
**NAME**

## INBREEDING AND DIVERSITY

| Genetic Diversity | RESULT | GENETIC RESULT |
|---|---|---|
| Coefficient Of Inbreeding | | 14% |
| MHC Class II - DLA DRB1 | | High Diversity |
| MHC Class II - DLA DQA1 and DQB1 | | High Diversity |

# DNA Test Report

## Dog Information

**King's Ranch Florentias (Tias)**
NAME

## TRAIT TESTS (1/3)

| Coat Color | RESULT | GENETIC RESULT |
|---|---|---|
| E Locus (MC1R) | No dark mask or grizzle | EE |
| K Locus (CBD103) | More likely to have a mostly solid black or brown coat | $K^BK^B$ |
| Intensity Loci | No impact on coat pattern | Intermediate Red Pigmentation |
| A Locus (ASIP) | Not expressed | $a^ta$ |
| D Locus (MLPH) | Dark areas of hair and skin are lightened | dd |
| Cocoa (HPS3) | No co alleles, not expressed | NN |
| B Locus (TYRP1) | Black or gray hair and skin | Bb |
| Saddle Tan (RALY) | Not expressed | NI |
| S Locus (MITF) | Likely to have little to no white in coat | SS |
| M Locus (PMEL) | No merle alleles | mm |
| R Locus (USH2A) | Likely no impact on coat pattern | rr |

# DNA Test Report

## Dog Information

**King's Ranch Florentias (Tias)**
NAME

## 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 unfurnished (no mustache, beard, and/or eyebrows) | II |
| Coat Length (FGF5) | Likely short or mid-length coat | ShSh |
| Shedding (MC5R) | Likely heavy/seasonal shedding | CT |
| Coat Texture (KRT71) | Likely straight coat | CC |
| 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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## Dog Information

**King's Ranch Florentias (Tias)**
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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) | Larger | GG |
| 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 |