

## Dog Information

Sayre's FairyWren (Wren)  
NAME

Female  
SEX

Australian Shepherd Group  
Breed with variety:

May 7th, 2021  
DATE OF BIRTH

100% Australian Shepherd  
BREED ANCESTRY

n/a  
MICROCHIP

AKC: DN67389706  
REGISTRATION

KIMBERLY SAYRE  
OWNER NAME

Canine Genetic Health Screen  
TEST

August 26th, 2021  
TEST DATE

## BREED HEALTH TESTS

| DISEASE   | GENE                | GENOTYPE | RESULT    | TESTING RECOMMENDED BY |
|---|---------------------|----------|-----------|------------------------|
| Canine Multifocal Retinopathy, cmr1                             | BEST1/VMD2 (Exon 2) | CC       | Clear     |                        |
| Collie Eye Anomaly, Choroidal Hypoplasia, CEA                   | NHEJ1 (Intron 4)    | NN       | Clear     |                        |
| Craniomandibular Osteopathy, CMO                                | SLC37A2 (Exon 15)   | CC       | Clear     |                        |
| Day Blindness, Cone Degeneration, Achromatopsia                 | CNGB3               | n/a      | n/a       |                        |
| Degenerative Myelopathy, DM                                     | SOD1(A)             | GA       | 1 Variant |                        |
| Hereditary Cataracts, Early-Onset Cataracts, Juvenile Cataracts | HSF4                | NN       | Clear     |                        |
| Hyperuricosuria and Hyperuricemia or Urolithiasis, HUU          | SLC2A9 (Exon 5)     | GG       | Clear     |                        |
| MDR1 Drug Sensitivity   | ABCB1               | NN       | Clear     |                        |
| Progressive Retinal Atrophy, prcd                               | PRCD Exon 1         | GG       | Clear     |                        |
| Neuronal Ceroid Lipofuscinosis 6, NCL 6                         | CLN6 (Exon 7)       | TT       | Clear     |                        |
| Neuronal Ceroid Lipofuscinosis 8, NCL 8                         | CLN8                | GG       | Clear     |                        |

## Dog Information

Sayre's FairyWren (Wren)  
NAME

## INBREEDING AND DIVERSITY

| Genetic Diversity                | RESULT | GENETIC RESULT |
|----------------------------------|--------|----------------|
| Coefficient Of Inbreeding        |        | 10%            |
| MHC Class II - DLA DRB1          |        | High Diversity |
| MHC Class II - DLA DQA1 and DQB1 |        | High Diversity |

## Dog Information

Sayre's FairyWren (Wren)  
NAME

## TRAIT TESTS (1/2)

| Coat Color                   | RESULT  | GENETIC RESULT                |
|------------------------------|---|-------------------------------|
| E Locus (MC1R)               | No dark mask or grizzle                                     | EE                            |
| K Locus (CBD103)             | More likely to have a patterned haircoat                    | k <sup>Y</sup> k <sup>Y</sup> |
| Intensity Loci LINKAGE       | Any light hair likely yellow or tan                         | Intermediate Red Pigmentation |
| A Locus (ASIP)               | Black/Brown and tan coat color pattern                      | a <sup>+</sup> a <sup>t</sup> |
| D Locus (MLPH)               | Dark areas of hair and skin are not lightened               | DD                            |
| Cocoa (HPS3)                 | No co alleles, not expressed                                | NN                            |
| B Locus (TYRP1)              | Black or gray hair and skin                                 | Bb                            |
| Saddle Tan (RALY)            | Not saddle tan patterned                                    | ll                            |
| S Locus (MITF)               | Likely solid colored, but may have small amounts of white   | Ssp                           |
| M Locus (PMEL)               | One merle allele, likely to appear merle or "phantom merle" | M*m                           |
| R Locus (USH2A) LINKAGE      | Likely no impact on coat pattern                            | rr                            |
| H Locus (Harlequin)          | No harlequin alleles  | hh                            |
| Other Coat Traits            | RESULT  | GENETIC RESULT                |
| Furnishings (RSP02) LINKAGE  | Likely unfurnished (no mustache, beard, and/or eyebrows)    | ll                            |
| Coat Length (FGF5)           | Likely long coat  | TT                            |
| Shedding (MC5R)              | Likely heavy/seasonal shedding                              | CC                            |
| Hairlessness (FOXI3) LINKAGE | Very unlikely to be hairless                                | NN                            |
| Hairlessness (SGK3)          | Very unlikely to be hairless                                | NN                            |

## Dog Information

Sayre's FairyWren (Wren)  
NAME

## TRAIT TESTS (2/2)

| Body Size               | RESULT       | GENETIC RESULT |
|-------------------------|--------------|----------------|
| Body Size (IGF1)        | Intermediate | NI             |
| Body Size (IGFR1)       | Larger       | GG             |
| Body Size (STC2)        | Smaller      | AA             |
| 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) LINKAGE     | Normal food motivation    | NN             |