Canine HealthCheck

# Results for Sammy

## Sammy's demographic profile:

Call Name: Sammy
Registered Name: Sunnyrains Son of Liberty
Breed: Australian Shepherd
Sex: Male
Age: 1

Owner:
Registration #: DN43972201
Microchip/Tattoo: 956000004390215
Kit #: 10404
Report Date: 2016-08-11

## Sammy's genetic health profile:

- **Sammy is at-risk for the following 2 diseases:**
  - Dilated cardiomyopathy
  - Hereditary cataracts (Australian Shepherd type)
- **Sammy is a carrier for the following 1 disease:**
  - Multidrug resistance 1
    **Carriers for this mutation may be at-risk.**
    **Read More**
- **Sammy had a normal result for all other diseases tested**

## Sammy's appearance profile:

- Sammy is a **Male**
- Sammy's coat is likely **Straight, Long** and **Black with tan points** in color
- Sammy's face likely **Has No Mask on the Muzzle** and a **Black** nose
- Sammy's tail is likely **Normal** in length

**These tests were developed and performed by Paw Print Genetics®, Spokane WA.**

## Explanation of Results

**Normal** A "normal" result means that your dog does not have the mutation that causes the associated genetic disease.

**Carrier** A "carrier" result indicates that your dog has inherited one copy of the mutation that has been reported to cause this genetic disease. Your dog may not be clinically affected by this mutation because two copies of the mutation are usually required to cause disease.

**At-Risk** An "at-risk" result indicates that your dog may have inherited one or two copies of the mutation that has been reported to cause this genetic disease. Depending on the

mode of genetic inheritance for this particular disease, inheriting one **or** two mutant copies of the gene may result in the disease.

*You may want to consider ordering follow-up testing to confirm the results of this initial screen for any dog that is "at-risk" for a disease.*

## Blood and Clotting

| | |
|---|---|
| Coagulation factor VII deficiency | Normal |
| Elliptocytosis | Normal |
| Glanzmann's thrombasthenia (Great Pyrenees type) | Normal |
| Glanzmann's thrombasthenia (Otterhound type) | Normal |
| Glycogen storage disease VII (Wachtelhund type) | Normal |
| Hemophilia A (Boxer type) | Normal |
| Hemophilia A (German Shepherd Dog, type 1) | Normal |
| Hemophilia A (German Shepherd Dog, type 2) | Normal |
| Hemophilia B (Cairn Terrier type) | Normal |
| Hemophilia B (Lhasa Apso type) | Normal |
| Hemophilia B (Rhodesian Ridgeback type) | Normal |
| Leukocyte adhesion deficiency, type III | Normal |
| May-Hegglin anomaly | Normal |
| P2RY12 receptor platelet disorder | Normal |
| Prekallikrein deficiency | Normal |
| Pyruvate kinase deficiency (Basenji type) | Normal |
| Pyruvate kinase deficiency (Beagle type) | Normal |
| Pyruvate kinase deficiency (Labrador Retriever type) | Normal |
| Pyruvate kinase deficiency (Pug type) | Normal |
| Pyruvate kinase deficiency (Terrier type) | Normal |
| Thrombopathia (American Eskimo Dog type) | Normal |
| Thrombopathia (Basset Hound type) | Normal |
| Thrombopathia (Newfoundland type) | Normal |
| Von Willebrand disease I | Normal |
| Von Willebrand disease II | Normal |
| Von Willebrand disease III (Kooikerhondje type) | Normal |
| Von Willebrand disease III (Scottish Terrier type) | Normal |

## Cancer

| | |
|---|---|
| Renal cystadenocarcinoma and nodular dermatofibrosis | Normal |

## Dental

| | |
|---|---|
| Amelogenesis imperfecta | Normal |

## Drug Metabolism

| | |
|---|---|
| Multidrug resistance 1 | At-Risk Carrier |

## Eyes

| | |
|---|---|
| Collie eye anomaly | Normal |
| Cone degeneration | Normal |
| Cone degeneration (German Shorthaired Pointer type) | Normal |
| Congenital stationary night blindness | Normal |
| Dry eye curly coat syndrome | Normal |
| Early retinal degeneration | Normal |
| GM1 Gangliosidosis (Alaskan Husky type) | Normal |
| GM1 Gangliosidosis (Portuguese Water Dog type) | Normal |
| GM1 Gangliosidosis (Shiba Inu type) | Normal |
| GM2 Gangliosidosis (Poodle type) | Normal |
| Hereditary cataracts | Normal |
| Hereditary cataracts (Australian Shepherd type) | At-Risk |
| Juvenile Laryngeal Paralysis and Polyneuropathy | Normal |
| Multifocal retinopathy 1 | Normal |
| Multifocal retinopathy 2 | Normal |
| Multifocal retinopathy 3 | Normal |
| Primary lens luxation | Normal |
| Primary open angle glaucoma | Normal |
| Progressive retinal atrophy (Basenji type) | Normal |
| Progressive retinal atrophy (Bullmastiff/Mastiff type) | Normal |
| Progressive retinal atrophy (Irish Setter type) | Normal |
| Progressive retinal atrophy (Sloughi type) | Normal |
| Progressive retinal atrophy, Cone-rod dystrophy 1 | Normal |
| Progressive retinal atrophy, Cone-rod dystrophy 2 | Normal |
| Progressive retinal atrophy, Cone-rod dystrophy 3 | Normal |
| Progressive retinal atrophy, Golden Retriever 1 | Normal |
| Progressive retinal atrophy, Golden Retriever 2 | Normal |
| Progressive retinal atrophy, PRA1 (Papillon type) | Normal |
| Progressive retinal atrophy, Progressive rod-cone degeneration | Normal |
| Progressive retinal atrophy, Rod-cone dysplasia 3 | Normal |
| Progressive retinal atrophy, generalized | Normal |

## Heart

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|---|---|
| Dilated cardiomyopathy | At-Risk |

## Hormonal

| | |
|---|---|
| Congenital hypothyroidism with goiter (Terrier type) | Normal |

## Immune System

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|---|---|
| Complement 3 deficiency | Normal |
| Cyclic neutropenia | Normal |
| Leukocyte adhesion deficiency, type I | Normal |
| Leukocyte adhesion deficiency, type III | Normal |
| Primary ciliary dyskinesia | Normal |
| Severe combined immunodeficiency disease (Terrier type) | Normal |
| Severe combined immunodeficiency disease (Wetterhoun type) | Normal |
| Severe combined immunodeficiency disease, X-linked (Basset Hound type) | Normal |
| Severe combined immunodeficiency disease, X-linked (Corgi type) | Normal |
| Trapped neutrophil syndrome | Normal |

## Liver/Gastrointestinal

| | |
|---|---|
| Gallbladder mucoceles | Normal |
| Glycogen storage disease IIIa | Normal |
| Intestinal cobalamin malabsorption (Beagle type) | Normal |
| Intestinal cobalamin malabsorption (Border Collie type) | Normal |

## Metabolic

| | |
|---|---|
| Adult-onset neuronal ceroid lipofuscinosis | Normal |
| GM1 Gangliosidosis (Alaskan Husky type) | Normal |
| GM1 Gangliosidosis (Portuguese Water Dog type) | Normal |
| GM1 Gangliosidosis (Shiba Inu type) | Normal |
| GM2 Gangliosidosis (Japanese Chin type) | Normal |
| GM2 Gangliosidosis (Poodle type) | Normal |
| Globoid cell leukodystrophy (Irish Setter type) | Normal |
| Globoid cell leukodystrophy (Terrier type) | Normal |
| Glycogen storage disease IIIa | Normal |
| Glycogen storage disease Ia | Normal |
| Glycogen storage disease VII (Wachtelhund type) | Normal |
| Intestinal cobalamin malabsorption (Beagle type) | Normal |
| Intestinal cobalamin malabsorption (Border Collie type) | Normal |
| L-2-hydroxyglutaric aciduria (Staffordshire Bull Terrier type) | Normal |
| Mucopolysaccharidosis I | Normal |
| Mucopolysaccharidosis IIIA (Dachshund type) | Normal |
| Mucopolysaccharidosis IIIA (New Zealand Huntaway type) | Normal |
| Mucopolysaccharidosis VII (Shepherd type) | Normal |
| Neuronal ceroid lipofuscinosis 1 | Normal |
| Neuronal ceroid lipofuscinosis 10 | Normal |
| Neuronal ceroid lipofuscinosis 2 | Normal |
| Neuronal ceroid lipofuscinosis 4A | Normal |
| Neuronal ceroid lipofuscinosis 5 | Normal |

| | |
|---|---|
| Neuronal ceroid lipofuscinosis 6 | Normal |
| Neuronal ceroid lipofuscinosis 8 (Australian Shepherd type) | Normal |
| Neuronal ceroid lipofuscinosis 8 (Setter type) | Normal |
| Pompe disease | Normal |
| Pyruvate dehydrogenase deficiency | Normal |
| Pyruvate kinase deficiency (Basenji type) | Normal |
| Pyruvate kinase deficiency (Beagle type) | Normal |
| Pyruvate kinase deficiency (Labrador Retriever type) | Normal |
| Pyruvate kinase deficiency (Pug type) | Normal |
| Pyruvate kinase deficiency (Terrier type) | Normal |

## Midline Defect

| | |
|---|---|
| Juvenile Laryngeal Paralysis and Polyneuropathy | Normal |
| Spinal dysraphism (Weimaraner type) | Normal |

## Musculoskeletal

| | |
|---|---|
| Adult-onset neuronal ceroid lipofuscinosis | Normal |
| Alaskan Malamute polyneuropathy | Normal |
| Chondrodysplasia (Karelian Bear Dog and Norwegian Elkhound type) | Normal |
| Congenital myasthenic syndrome (Labrador Retriever type) | Normal |
| Congenital myasthenic syndrome (Old Danish Pointer type) | Normal |
| Degenerative myelopathy | Normal |
| Exercise-induced collapse | Normal |
| GM1 Gangliosidosis (Alaskan Husky type) | Normal |
| GM1 Gangliosidosis (Portuguese Water Dog type) | Normal |
| GM1 Gangliosidosis (Shiba Inu type) | Normal |
| Glycogen storage disease IIIa | Normal |
| Glycogen storage disease VII (Wachtelhund type) | Normal |
| Greyhound polyneuropathy | Normal |
| Inherited myopathy of Great Danes | Normal |
| Juvenile Laryngeal Paralysis and Polyneuropathy | Normal |
| Mucopolysaccharidosis I | Normal |
| Mucopolysaccharidosis VII (Shepherd type) | Normal |
| Muscular Dystrophy (Golden Retriever Type) | Normal |
| Myostatin deficiency (Whippet and Longhaired Whippet type) | Normal |
| Myotonia congenita (Australian Cattle Dog type) | Normal |
| Myotonia congenita (Schnauzer type) | Normal |
| Myotubular myopathy 1 | Normal |
| Osteochondrodysplasia | Normal |
| Osteogenesis imperfecta (Beagle type) | Normal |
| Osteogenesis imperfecta (Golden Retriever type) | Normal |
| Pembroke Welsh Corgi Duchenne muscular dystrophy | Normal |
| Polyneuropathy (Leonberger and Saint Bernard type) | Normal |
| Pompe disease | Normal |
| Skeletal dysplasia 2 | Normal |

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|---|---|
| Vitamin D dependent rickets, type II (Pomeranian type) | Normal |

## Neurologic

| | |
|---|---|
| Adult-onset neuronal ceroid lipofuscinosis | Normal |
| Alaskan Husky encephalopathy | Normal |
| Alaskan Malamute polyneuropathy | Normal |
| Benign familial juvenile epilepsy | Normal |
| Canine multiple system degeneration (Chinese Crested type) | Normal |
| Canine multiple system degeneration (Kerry Blue Terrier type) | Normal |
| Cerebellar ataxia (Finnish Hound type) | Normal |
| Congenital myasthenic syndrome (Labrador Retriever type) | Normal |
| Congenital myasthenic syndrome (Old Danish Pointer type) | Normal |
| Degenerative myelopathy | Normal |
| Episodic falling syndrome | Normal |
| Exercise-induced collapse | Normal |
| GM1 Gangliosidosis (Alaskan Husky type) | Normal |
| GM1 Gangliosidosis (Portuguese Water Dog type) | Normal |
| GM1 Gangliosidosis (Shiba Inu type) | Normal |
| GM2 Gangliosidosis (Japanese Chin type) | Normal |
| GM2 Gangliosidosis (Poodle type) | Normal |
| Globoid cell leukodystrophy (Irish Setter type) | Normal |
| Globoid cell leukodystrophy (Terrier type) | Normal |
| Greyhound polyneuropathy | Normal |
| Juvenile Laryngeal Paralysis and Polyneuropathy | Normal |
| L-2-hydroxyglutaric aciduria (Staffordshire Bull Terrier type) | Normal |
| Late onset ataxia | Normal |
| Mucopolysaccharidosis I | Normal |
| Mucopolysaccharidosis IIIA (Dachshund type) | Normal |
| Mucopolysaccharidosis IIIA (New Zealand Huntaway type) | Normal |
| Myotonia congenita (Australian Cattle Dog type) | Normal |
| Myotonia congenita (Schnauzer type) | Normal |
| Narcolepsy (Dachshund type) | Normal |
| Narcolepsy (Doberman Pinscher type) | Normal |
| Narcolepsy (Labrador Retriever type) | Normal |
| Neonatal cerebellar cortical degeneration | Normal |
| Neonatal encephalopathy with seizures | Normal |
| Neuronal ceroid lipofuscinosis 1 | Normal |
| Neuronal ceroid lipofuscinosis 10 | Normal |
| Neuronal ceroid lipofuscinosis 2 | Normal |
| Neuronal ceroid lipofuscinosis 4A | Normal |
| Neuronal ceroid lipofuscinosis 5 | Normal |
| Neuronal ceroid lipofuscinosis 6 | Normal |
| Neuronal ceroid lipofuscinosis 8 (Australian Shepherd type) | Normal |
| Neuronal ceroid lipofuscinosis 8 (Setter type) | Normal |
| Polyneuropathy (Leonberger and Saint Bernard type) | Normal |
| Sensory ataxic neuropathy | Normal |
| Spinocerebellar ataxia | Normal |

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|---|---|
| Startle disease | Normal |

## Neuromuscular

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|---|---|
| Globoid cell leukodystrophy (Irish Setter type) | Normal |
| Globoid cell leukodystrophy (Terrier type) | Normal |

## Reproduction

| | |
|---|---|
| Primary ciliary dyskinesia | Normal |

## Respiratory

| | |
|---|---|
| Primary ciliary dyskinesia | Normal |

## Skin and Hair

| | |
|---|---|
| Anhidrotic ectodermal dysplasia | Normal |
| Dry eye curly coat syndrome | Normal |
| Dystrophic epidermolysis bullosa | Normal |
| Ectodermal dysplasia | Normal |
| Epidermolytic hyperkeratosis | Normal |
| Hereditary footpad hyperkeratosis (Irish Terrier and Kromfohrländer type) | Normal |
| Hereditary nasal parakeratosis | Normal |
| Ichthyosis (Golden Retriever type) | Normal |
| Renal cystadenocarcinoma and nodular dermatofibrosis | Normal |

## Urinary Tract

| | |
|---|---|
| Cystinuria (Australian Cattle Dog type) | Normal |
| Cystinuria (Miniature Pinscher type) | Normal |
| Cystinuria (Newfoundland type) | Normal |
| Familial nephropathy (Cocker Spaniel type) | Normal |
| Familial nephropathy (English Springer Spaniel type) | Normal |
| Fanconi syndrome | Normal |
| Hereditary nephritis (Samoyed type) | Normal |
| Hyperuricosuria | Normal |
| Persistent Müllerian duct syndrome | Normal |
| Primary ciliary dyskinesia | Normal |
| Primary hyperoxaluria | Normal |
| Renal cystadenocarcinoma and nodular dermatofibrosis | Normal |