

Calcifer
Registration: SBT 090215 071
Breed: Bengal

Sample ID: KTBR06796
Test Date: 11/2/2020
Optimal Selection - Feline - Legacy

DNA Test Report

Owner Info

First Name

Summer

Last Name

Wilson

Pet Info

Registered Name

Calcifer

Date of Birth

9/2/2015

Nickname (Call Name)

Calcifer

Sample ID

KTBR06796

Sex

Male

Registration

SBT 090215 071

Country of Origin

US

Microchip ID

N/A

Owner Reported Breed

Bengal

Tattoo ID

N/A

DNA Test Report

Health Conditions Known in This Breed

| Genetic Condition | Gene | Risk Variant | Copies | Result |
|---------------------------------------------------------|--------|--------------|--------|---------|
| Progressive Retinal Atrophy (Discovered in Bengal cats) | KIF3B | G>A | 1 | Notable |
| Progressive Retinal Atrophy (rdAc-PRA) | CEP290 | T>G | 0 | Clear |
| Pyruvate Kinase Deficiency | PLKR | G>A | 0 | Clear |

Other Conditions Tested

| Genetic Condition | Gene | Risk Variant | Copies | Result |
|---------------------------------------------------------------------|---------|--------------|--------|--------|
| Acute Intermittent Porphyria (Variant 1) | AIP | Deletion | 0 | Clear |
| Acute Intermittent Porphyria (Variant 2) | AIP | G>A | 0 | Clear |
| Acute Intermittent Porphyria (Variant 3) | HMBS | Insertion | 0 | Clear |
| Acute Intermittent Porphyria (Variant 4) | HMBS | Deletion | 0 | Clear |
| Acute Intermittent Porphyria (Variant 5) | HMBS | G>A | 0 | Clear |
| Autoimmune Lymphoproliferative Syndrome | FASL | Insertion | 0 | Clear |
| Burmese Head Defect (Discovered in Burmese) | ALX1 | Deletion | 0 | Clear |
| Chediak-Higashi Syndrome (Discovered in Persian cats) | CHS | Insertion | 0 | Clear |
| Congenital Adrenal Hyperplasia | CYP11B1 | G>A | 0 | Clear |
| Congenital Erythropoietic Porphyria | UROS | G>A | 0 | Clear |
| Congenital Myasthenic Syndrome (Discovered in Devon Rex and Sphynx) | COLQ | G>A | 0 | Clear |
| Cystinuria Type 1A | SCL3A1 | C>T | 0 | Clear |
| Cystinuria Type B (Variant 1) | SCL7A9 | C>T | 0 | Clear |
| Cystinuria Type B (Variant 2) | SCL7A9 | G>A | 0 | Clear |
| Cystinuria Type B (Variant 3) | SCL7A9 | T>A | 0 | Clear |
| Dihydropyrimidinase Deficiency | DPYS | G>A | 0 | Clear |
| Earfold and Osteochondrodysplasia (Discovered in the Scottish Fold) | TRPV4 | G>T | 0 | Clear |

DNA Test Report

Other Conditions Tested (continued)

| Genetic Condition | Gene | Risk Variant | Copies | Result |
|---------------------------------------------------------------------|-------|--------------|--------|--------|
| Factor XII Deficiency (Variant 1) | F12 | Deletion | 0 | Clear |
| Factor XII Deficiency (Variant 2) | F12 | Deletion | 0 | Clear |
| Familial Episodic Hypokalaemic Polymyopathy (Discovered in Burmese) | WNK4 | C>T | 0 | Clear |
| Glutaric Aciduria Type II | ETFDH | T>G | 0 | Clear |
| Glycogen Storage Disease (Discovered in Norwegian Forest Cat) | GBE1 | Insertion | 0 | Clear |
| GM1 Gangliosidosis | GLB1 | G>C | 0 | Clear |
| GM2 Gangliosidosis | GM2A | Deletion | 0 | Clear |
| GM2 Gangliosidosis, type II (Discovered in Burmese cats) | HEXB | O>O | 0 | Clear |
| GM2 Gangliosidosis, type II (Discovered in domestic shorthair cats) | HEXB | Insertion | 0 | Clear |
| GM2 Gangliosidosis, type II (Discovered in japanese domestic cats) | HEXB | C>T | 0 | Clear |
| Hemophilia B (Variant 1) | F9 | C>T | 0 | Clear |
| Hemophilia B (Variant 2) | F9 | G>A | 0 | Clear |
| Hyperoxaluria type II | GRHPR | G>A | 0 | Clear |
| Hypertrophic Cardiomyopathy (A31P; Discovered in Maine Coon) | MYBPC | G>C | 0 | Clear |
| Hypertrophic Cardiomyopathy (Discovered in Ragdoll) | MYBPC | C>T | 0 | Clear |
| Hypotrichosis (Discovered in Birman cats) | FOXN1 | Deletion | 0 | Clear |
| Lipoprotein Lipase Deficiency | LPL | G>A | 0 | Clear |
| Medication Sensitivity (MDR1) | ABCB1 | Deletion | 0 | Clear |
| Mucopolysaccharidosis Type I | IDUA | Deletion | 0 | Clear |
| Mucopolysaccharidosis Type VI (mild form) | ARSB | G>A | 0 | Clear |
| Mucopolysaccharidosis Type VI (severe) | ARSB | T>C | 0 | Clear |
| Mucopolysaccharidosis Type VII | GUSB | G>A | 0 | Clear |

DNA Test Report

Other Conditions Tested (continued)

| Genetic Condition | Gene | Risk Variant | Copies | Result |
|----------------------------------------------------------|---------|--------------|--------|--------|
| Mucopolysaccharidosis VII | USB | C>T | 0 | Clear |
| Myotonia Congenita | CLCN1 | G>T | 0 | Clear |
| Polycystic Kidney Disease (PKD) | PKD1 | C>A | 0 | Clear |
| Progressive Retinal Atrophy (Discovered in Persian cats) | PRA | C>T | 0 | Clear |
| Sphingomyelinosis (Variant 1) | NPC1 | G>C | 0 | Clear |
| Sphingomyelinosis (Variant 2) | NPC2 | G>A | 0 | Clear |
| Spinal Muscular Atrophy (Discovered in Maine Coon) | LIX1 | Deletion | 0 | Clear |
| Vitamin D-Dependent Rickets | CYP27B1 | G>T | 0 | Clear |

DNA Test Report

Coat Color

| Genetic Trait | Gene | Variant | Copies | Result |
|--------------------------------------------|-------|---------------------|--------|-----------------------------------|
| Charcoal (Discovered in Bengal cats) | ASIP | A ^{Pb} | 0 | No effect |
| Solid color (Non-Agouti) | ASIP | a | 0 | Agouti (banded) hair |
| Partial and Full White | FERV1 | W or w ^s | 0 | No effect |
| Gloving (Birman cat - White Gloves) | KIT | w ^g | 0 | No effect |
| Amber (Discovered in Norwegian Forest Cat) | MC1R | e | 0 | No effect |
| Russet (Discovered in Burmese cats) | MC1R | e ^r | 0 | No effect |
| Dilution | MLPH | d | 0 | No effect |
| Albinism (Discovered in Oriental breeds) | TYR | c ^a | 0 | No effect |
| Colorpoint (Discovered in Burmese cats) | TYR | c ^b | 1 | Burmese colorpoint carrier |
| Colorpoint (Discovered in Siamese cats) | TYR | c ^s | 1 | Siamese colorpoint carrier |
| Mocha (Discovered in Burmese cats) | TYR | c ^m | 0 | No effect |
| Chocolate | TYRP | b | 0 | No effect |
| Cinnamon | TYRP | b ^l | 0 | No effect |

Coat Type

| Genetic Trait | Gene | Variant | Copies | Result |
|----------------------------------------------------------------|------|------------------|--------|--------------|
| Long hair (Mutation M1, discovered in Ragdolls) | FGF5 | M1 | 0 | No effect |
| Long hair (Mutation M2, discovered in Norwegian Forest cats) | FGF5 | M2 | 0 | No effect |
| Long hair (Mutation M3, discovered in Ragdolls and Maine Coon) | FGF5 | M3 | -1 | Inconclusive |
| Long hair (Mutation M4, common) | FGF5 | M4 | 0 | No effect |
| Lykoi coat (Mutation Ca) | HR | hr ^{Ca} | 0 | No effect |

DNA Test Report

Coat Type (continued)

| Genetic Trait | Gene | Variant | Copies | Result |
|---------------------------------------------------|---------|------------------|--------|---------------------|
| Lykoi coat (Mutation VA) | HR | hr ^{VA} | 0 | No effect |
| Hairlessness (Discovered in Sphynx cats) | KRT71 | re ^{hr} | 0 | No effect |
| Rexing (Discovered in Devon Rex) | KRT71 | re ^{dr} | 0 | No effect |
| Rexing (Discovered in Cornish Rex and German Rex) | LPAR6 | r | 0 | No effect |
| Glitter | Pending | gl | 2 | Glitter coat likely |

Body Features

| Genetic Trait | Gene | Variant | Copies | Result |
|--------------------------------------------------|--------|----------|--------|-----------|
| Short tail (Discovered in Japanese Bobtail cats) | HES7 | jb | 0 | No effect |
| Polydactyly (Mutation HW) | LIMBR1 | HW | 0 | No effect |
| Polydactyly (Mutation UK1) | LIMBR1 | UK1 | 0 | No effect |
| Polydactyly (Mutation UK2) | LIMBR1 | UK2 | 0 | No effect |
| Short tail (Discovered in Manx - variant 1) | T | C1199del | 0 | No effect |
| Short tail (Discovered in Manx - variant 2) | T | T988del | 0 | No effect |