AMERICAN KENNEL CLUB · FOUNDED 1884

Certified Pedigree

MADAME CHANEL CHARLOTTE BULLS
NP56445702
FRENCH BULLDOG FEMALE FN BLK MSK
Date Whelped: 09/25/2019
Breeder: MS. DEBBIE HIGLEY

Sire **SIR LYNCOLN RARE GERY BULLS**
NP42787701 (01-17) BRDL (SRB) AKC DNA #V792342

- **FJODOR LAMORENA DEL**
  KSS JR 72937 FB
  - **BENJAMIN VON CREBISON**
    MET 8940/13
    - **UGYERI SZOLLOS DARIUSZ**
      MET 3275/04
    - **NYIRMED-TO SZEPE JUCI**
      MET FR.BULL.3736/04
  - **DOROGOE UDOVOLSTVIE FORSUNKA**
    KSS JR72767FB
    - **DOROGOE UDOVOLSTVIE YUDASHKIN**
      RKF 2028717
    - **DOROGOE UDOLOVSTVIE MOULIN ROUGE**
      RKF 2011195
- **LOTTO RARE GERY BULL'S**
  KSS JR73421FB
  - **MAROSMENTI CSILLAG DAKOTA**
    MET 6794/12
    - **BENOZZO NERO**
      MET FR.BULL.4411/10
    - **MAROSMENTI CSILLAG ADA-JULIET**
      MET FR.BULL.2862/09
  - **GERY BULLS BAMBI**
    KSS JR 73419 FB
    - **NAGYERDOI CHAMPION OSZKAR**
      MET FR.BULL.6994/05
    - **KINGSBLOOD ONYX**
      MET FR.BULL.732/08

Dam **HIGLEY'S CHARLOTTE WEB**
NP48775401 (01-20) BRDL

- **COUGHLINS BLACK GOLD VON GOLDBLOOD**
  NP42068906 (04-18) BLK & FN
  - **ANUBIS GOLD BLOOD**
    NP41120101 (04-16) BL WH MKGS (SRB) AKC DNA #V775587
    - **CURLY TRINITY TREASURE**
      JR 72956FB
    - **LITTLE MONSTER VICTORIA**
      MET FR.BULL.9465/13
  - **CEC-C ROSALIE**
    NP37392307 (10-15) BLK & FN
    - **WILD MAGIC FRENCH BULLDOGS SPARKY**
      NP31294705 (05-13) GR & WH AKC DNA #V710470
    - **AGATE IS ZARDELIU**
      NP32173101 (06-14) BLK & FN WH MKGS (LIT) AKC DNA #V722605
- **BLUE LILY**
  NP44462106 (04-18) FN BRDL
  - **LOKI HIGLEY**
    NP38187503 (03-16) FN BRDL BRDL MKGS AKC DNA #V780422
    - **HOMER ALBERT**
      NP26446006 (03-12) BRDL & WH
    - **ELLIE CABAZON**
      NP29174510 (01-15) BRDL & WH BRDL MKGS
  - **SYBALLE ROSE**
    NP39412905 (02-17) FN BLK MSK
    - **DBG' S BASHFUL BLUES AKA DUNGEON**
      NP23310702 (08-10) FN AKC DNA #V695296
    - **KELLYS TOY LANDS SCARLET EMBER BLAZE**
      NP31947702 (02-14) FN WH MKGS

AMERICAN KENNEL CLUB®

Gina DiNardo
Executive Secretary

The Seal of The American Kennel Club affixed hereto certifies that this pedigree was compiled from official Stud Book records on September 10, 2020.

WISDOM PANEL™

DNA Test Report

Owner Info

First Name
Sheri

Last Name
Quinton

Pet Info

Registered Name
Chanel

Nickname (Call Name)
Chanel

Sex
Female

Date of Birth
9/25/2019

Sample ID
PQXHPMX

Registration
N/A

Microchip ID
N/A

Tattoo ID
N/A

Ancestry Results

Guard

100% French Bulldog

DNA Test Report

Health Conditions Tested

Genetic Condition	Gene	Risk Variant	Copies	Result
Canine Multifocal Retinopathy 1	BEST1	**C>T**	**1**	**Notable**
Degenerative Myelopathy	SOD1	**G>A**	**1**	**Notable**
2,8-dihydroxyadenine (DHA) Urolithiasis	APRT	G>A	0	Clear
Acral Mutilation Syndrome	GDNF	C>T	0	Clear
Acute Respiratory Distress Syndrome	ANLN	C>T	0	Clear
Alaskan Husky Encephalopathy	SLC19A3	G>A	0	Clear
Alexander Disease	GFAP	G>A	0	Clear
Amelogenesis Imperfecta	ENAM	Deletion	0	Clear
Bandera's Neonatal Ataxia	GRM1	Insertion	0	Clear
Benign Familial Juvenile Epilepsy	LGI2	A>T	0	Clear
Canine Leukocyte Adhesion Deficiency (CLAD), type III	FERMT3	Insertion	0	Clear
Canine Multifocal Retinopathy 2	BEST1	G>A	0	Clear
Canine Multifocal Retinopathy 3	BEST1	Deletion	0	Clear
Canine Scott Syndrome	ANO6	G>A	0	Clear
Centronuclear Myopathy (Discovered in the Great Dane)	BIN1	A>G	0	Clear
Centronuclear Myopathy (Discovered in the Labrador Retriever)	PTPLA	Insertion	0	Clear
Cerebellar Ataxia	RAB24	A>C	0	Clear
Cerebellar Cortical Degeneration	SNX14	C>T	0	Clear
Cerebellar Hypoplasia	VLDLR	Deletion	0	Clear
Cerebral Dysfunction	SLC6A3	G>A	0	Clear
Chondrodysplasia	ITGA10	C>T	0	Clear
Cleft Lip & Palate with Syndactyly	ADAMTS20	Deletion	0	Clear

Health Conditions Tested (continued)

Genetic Condition	Gene	Risk Variant	Copies	Result
Cleft Palate	DLX6	C>A	0	Clear
Complement 3 Deficiency	C3	Deletion	0	Clear
Cone Degeneration (Discovered in the Alaskan Malamute)	CNGB3	Deletion	0	Clear
Cone Degeneration (Discovered in the German Shepherd Dog)	CNGA3	C>T	0	Clear
Cone Degeneration (Discovered in the German Shorthaired Pointer)	CNGB3	G>A	0	Clear
Cone-Rod Dystrophy	NPHP4	Deletion	0	Clear
Cone-Rod Dystrophy 1	PDE6B	Deletion	0	Clear
Cone-Rod Dystrophy 2	IQCB1	Insertion	0	Clear
Congenital Dyshormonogenic Hypothyroidism with Goiter (Discovered in the Shih Tzu)	SLC5A5	G>A	0	Clear
Congenital Hypothyroidism (Discovered in the Tenterfield Terrier)	TPO	C>T	0	Clear
Congenital Hypothyroidism (Discovered in the Toy Fox and Rat Terrier)	TPO	C>T	0	Clear
Congenital Myasthenic Syndrome (Discovered in the Golden Retriever)	COLQ	G>A	0	Clear
Congenital Myasthenic Syndrome (Discovered in the Jack Russell Terrier)	CHRNE	Insertion	0	Clear
Congenital Myasthenic Syndrome (Discovered in the Labrador Retriever)	COLQ	T>C	0	Clear
Congenital Myasthenic Syndrome (Discovered in the Old Danish Pointer)	CHAT	G>A	0	Clear
Congenital Stationary Night Blindness (CSNB)	RPE65	A>T	0	Clear
Craniomandibular Osteopathy	SLC37A2	C>T	0	Clear
Cystic Renal Dysplasia and Hepatic Fibrosis	INPP5E	G>A	0	Clear
Cystinuria Type I-A	SLC3A1	C>T	0	Clear
Cystinuria Type II-A	SLC3A1	Deletion	0	Clear
Deafness and Vestibular Dysfunction (Discovered in Doberman Pinscher)	PTPRQ	Insertion	0	Clear
Demyelinating Neuropathy	SBF2	G>T	0	Clear

Health Conditions Tested (continued)

Genetic Condition	Gene	Risk Variant	Copies	Result
Dental Hypomineralization	FAM20C	C>T	0	Clear
Dilated Cardiomyopathy (Discovered in the Schnauzer)	Pending	Deletion	0	Clear
Dominant Progressive Retinal Atrophy	RHO	C>G	0	Clear
Dystrophic Epidermolysis Bullosa (Discovered in the Central Asian Ovcharka)	COL7A1	C>T	0	Clear
Dystrophic Epidermolysis Bullosa (Discovered in the Golden Retriever)	COL7A1	C>T	0	Clear
Early Retinal Degeneration (Discovered in the Norwegian Elkhound)	STK38L	A>C	0	Clear
Early-onset PRA (Discovered in the Portuguese Water Dog)	CCDC66	Insertion	0	Clear
Early-Onset Progressive Polyneuropathy (Discovered in the Alaskan Malamute)	NDRG1	G>T	0	Clear
Early-Onset Progressive Polyneuropathy (Discovered in the Greyhound)	NDRG1	Deletion	0	Clear
Enamel Hypoplasia (Discovered in the Parson Russell Terrier)	ENAM	C>T	0	Clear
Epidermolytic Hyperkeratosis	KRT10	G>T	0	Clear
Episodic Falling Syndrome	BCAN	Insertion	0	Clear
Exercise-Induced Collapse	DNM1	G>T	0	Clear
Factor VII Deficiency	F7	G>A	0	Clear
Factor XI Deficiency	FXI	Insertion	0	Clear
Fanconi Syndrome	FAN1	Deletion	0	Clear
Fetal Onset Neuroaxonal Dystrophy	MFN2	G>C	0	Clear
Focal Non-Epidermolytic Palmoplantar Keratoderma	KRT16	G>C	0	Clear
Generalized Progressive Retinal Atrophy (Discovered in the Schapendoes)	CCDC66	Insertion	0	Clear
Glanzmann Thrombasthenia Type I	ITGA2B	C>T	0	Clear
Glanzmann Thrombasthenia Type I (Discovered in Great Pyrenees)	ITGA2B	C>G	0	Clear
Globoid Cell Leukodystrophy (Discovered in Terriers)	GALC	A>C	0	Clear

Health Conditions Tested (continued)

Genetic Condition	Gene	Risk Variant	Copies	Result
Globoid Cell Leukodystrophy (Discovered in the Irish Setter)	GALC	A>T	0	Clear
Glycogen Storage Disease Type Ia	G6PC	G>C	0	Clear
Glycogen Storage Disease Type IIIa, (GSD IIIa)	AGL	Deletion	0	Clear
GM1 Gangliosidosis (Discovered in the Portuguese Water Dog)	GLB1	G>A	0	Clear
GM1 Gangliosidosis (Discovered in the Shiba)	GLB1	Deletion	0	Clear
GM2 Gangliosidosis (Discovered in the Japanese Chin)	HEXA	G>A	0	Clear
GM2 Gangliosidosis (Discovered in the Toy Poodle)	HEXB	Deletion	0	Clear
Goniodysgenesis and Glaucoma (Discovered in the Border Collie)	OLFML3	G>A	0	Clear
Hemophilia A (Discovered in Old English Sheepdog)	FVIII	C>T	0	Clear
Hemophilia A (Discovered in the Boxer)	FVIII	C>G	0	Clear
Hemophilia A (Discovered in the German Shepherd Dog - Variant 1)	FVIII	G>A	0	Clear
Hemophilia A (Discovered in the German Shepherd Dog - Variant 2)	FVIII	G>A	0	Clear
Hemophilia A (Discovered in the Havanese)	FVIII	Insertion	0	Clear
Hemophilia B	FIX	G>A	0	Clear
Hemophilia B (Discovered in the Airedale Terrier)	FIX	A>T	0	Clear
Hemophilia B (Discovered in the Lhasa Apso)	FIX	Deletion	0	Clear
Hereditary Ataxia (Discovered in the Norwegian Buhund)	KCNIP4	T>C	0	Clear
Hereditary Elliptocytosis	SPTB	C>T	0	Clear
Hereditary Footpad Hyperkeratosis	FAM83G	G>C	0	Clear
Hereditary Nasal Parakeratosis (Discovered in the Greyhound)	SUV39H2	Deletion	0	Clear
Hereditary Nasal Parakeratosis (Discovered in the Labrador Retriever)	SUV39H2	A>C	0	Clear
Hereditary Vitamin D-Resistant Rickets Type II	VDR	Deletion	0	Clear

Health Conditions Tested (continued)

Genetic Condition	Gene	Risk Variant	Copies	Result
Hyperekplexia or Startle Disease	SLC6A5	G>T	0	Clear
Hyperuricosuria	SLC2A9	G>T	0	Clear
Hypocatalasia	CAT	G>A	0	Clear
Hypomyelination	FNIP2	Deletion	0	Clear
Hypophosphatasia	Pending	T>G	0	Clear
Ichthyosis (Discovered in the American Bulldog)	NIPAL4	Deletion	0	Clear
Ichthyosis (Discovered in the Great Dane)	SLC27A4	G>A	0	Clear
Intestinal Cobalamin Malabsorption (Discovered in the Beagle)	CUBN	Deletion	0	Clear
Intestinal Cobalamin Malabsorption (Discovered in the Border Collie)	CUBN	Deletion	0	Clear
Intestinal Cobalamin Malabsorption (Discovered in the Komondor)	CUBN	G>A	0	Clear
Juvenile Encephalopathy (Discovered in the Parson Russell Terrier)	Pending	Deletion	0	Clear
Juvenile Laryngeal Paralysis and Polyneuropathy	RAB3GAP1	Deletion	0	Clear
Juvenile Myoclonic Epilepsy	DIRAS1	Deletion	0	Clear
L-2-Hydroxyglutaric Aciduria	L2HGDH	T>C	0	Clear
L-2-Hydroxyglutaric Aciduria (Discovered in the Westie)	Pending	Insertion	0	Clear
Lagotto Storage Disease	ATG4D	G>A	0	Clear
Lamellar Ichthyosis	TGM1	Insertion	0	Clear
Lethal Acrodermatitis (Discovered in the Bull Terrier)	MKLN1	A>C	0	Clear
Ligneous Membranitis	PLG	T>A	0	Clear
Lung Developmental Disease (Discovered in the Airedale Terrier)	LAMP3	C>T	0	Clear
Macrothrombocytopenia	TUBB1	G>A	0	Clear
May-Hegglin Anomaly	MYH9	G>A	0	Clear

Health Conditions Tested (continued)

Genetic Condition	Gene	Risk Variant	Copies	Result
MDR1 Medication Sensitivity	MDR1/ABCB1	Deletion	0	Clear
Microphthalmia (Discovered in the Soft-Coated Wheaten Terrier)	RBP4	Deletion	0	Clear
Mucopolysaccharidosis Type IIIA (Discovered in the Dachshund)	SGSH	C>A	0	Clear
Mucopolysaccharidosis Type IIIA (Discovered in the New Zealand Huntaway)	SGSH	Insertion	0	Clear
Mucopolysaccharidosis Type VII (Discovered in the Brazilian Terrier)	GUSB	C>T	0	Clear
Mucopolysaccharidosis Type VII (Discovered in the German Shepherd Dog)	GUSB	G>A	0	Clear
Muscular Dystrophy (Discovered in the Cavalier King Charles Spaniel)	Dystrophin	G>T	0	Clear
Muscular Dystrophy (Discovered in the Golden Retriever)	Dystrophin	A>G	0	Clear
Muscular Dystrophy (Discovered in the Landseer)	COL6A1	G>T	0	Clear
Muscular Dystrophy (Discovered in the Norfolk Terrier)	Dystrophin	Deletion	0	Clear
Muscular Hypertrophy (Double Muscling)	MSTN	T>A	0	Clear
Musladin-Lueke Syndrome	ADAMTSL2	C>T	0	Clear
Myeloperoxidase Deficiency	MOP	C>T	0	Clear
Myotonia Congenita	CLCN1	Insertion	0	Clear
Myotonia Congenita (Discovered in the Labrador Retriever)	CLCN1	T>A	0	Clear
Myotonia Congenita (Discovered in the Miniature Schnauzer)	CLCN1	C>T	0	Clear
Myotubular Myopathy	MTM1	A>C	0	Clear
Narcolepsy (Discovered in the Dachshund)	HCRTR2	G>A	0	Clear
Narcolepsy (Discovered in the Labrador Retriever)	HCRTR2	G>A	0	Clear
Nemaline Myopathy	NEB	C>A	0	Clear
Neonatal Cerebellar Cortical Degeneration	SPTBN2	Deletion	0	Clear
Neonatal Encephalopathy with Seizures	ATF2	T>G	0	Clear

Health Conditions Tested (continued)

Genetic Condition	Gene	Risk Variant	Copies	Result
Neuroaxonal Dystrophy	TECPR2	C>T	0	Clear
Neuroaxonal Dystrophy (Discovered in the Papillon)	PLA2G6	G>A	0	Clear
Neuroaxonal Dystrophy (Discovered in the Rottweiler)	VPS11	A>G	0	Clear
Neuronal Ceroid Lipofuscinosis 1	PPT1	Insertion	0	Clear
Neuronal Ceroid Lipofuscinosis 12 (Discovered in the Australian Cattle Dog)	ATP13A2	C>T	0	Clear
Neuronal Ceroid Lipofuscinosis 7	MFSD8	Deletion	0	Clear
Neuronal Ceroid Lipofuscinosis 8 (Discovered in the Alpine Dachsbracke)	CLN8	Deletion	0	Clear
Neuronal Ceroid Lipofuscinosis 8 (Discovered in the Australian Shepherd)	CLN8	G>A	0	Clear
Neuronal Ceroid Lipofuscinosis 8 (Discovered in the English Setter)	CLN8	T>C	0	Clear
Neuronal Ceroid Lipofuscinosis 8 (Discovered in the Saluki)	CLN8	Insertion	0	Clear
Obesity risk (POMC)	POMC	Deletion	0	Clear
Osteochondrodysplasia	SLC13A1	Deletion	0	Clear
Osteochondromatosis (Discovered in the American Staffordshire Terrier)	EXT2	C>A	0	Clear
Osteogenesis Imperfecta (Discovered in the Beagle)	COL1A2	C>T	0	Clear
Osteogenesis Imperfecta (Discovered in the Dachshund)	SERPINH1	T>C	0	Clear
P2RY12-associated Bleeding Disorder	P2RY12	Deletion	0	Clear
Paroxysmal Dyskinesia	PIGN	C>T	0	Clear
Persistent Müllerian Duct Syndrome	AMHR2	C>T	0	Clear
Phosphofructokinase Deficiency	PFKM	G>A	0	Clear
Polycystic Kidney Disease	PKD1	G>A	0	Clear
Prekallikrein Deficiency	KLKB1	T>A	0	Clear
Primary Ciliary Dyskinesia	CCDC39	C>T	0	Clear

Health Conditions Tested (continued)

Genetic Condition	Gene	Risk Variant	Copies	Result
Primary Ciliary Dyskinesia (Discovered in the Alaskan Malamute)	NME5	Deletion	0	Clear
Primary Lens Luxation	ADAMTS17	G>A	0	Clear
Primary Open Angle Glaucoma (Discovered in Basset Fauve de Bretagne)	ADAMTS17	G>A	0	Clear
Primary Open Angle Glaucoma (Discovered in Petit Basset Griffon Vendeen)	ADAMTS17	Insertion	0	Clear
Primary Open Angle Glaucoma and Lens Luxation (Discovered in Chinese Shar-Pei)	ADAMTS17	Deletion	0	Clear
Progressive Early-Onset Cerebellar Ataxia	SEL1L	T>C	0	Clear
Progressive Retinal Atrophy (Discovered in the Basenji)	SAG	T>C	0	Clear
Progressive Retinal Atrophy (Discovered in the Golden Retriever - GR-PRA1 variant)	SLC4A3	Insertion	0	Clear
Progressive Retinal Atrophy (Discovered in the Lhasa Apso)	Pending	Insertion	0	Clear
Progressive Retinal Atrophy (Discovered in the Papillon and Phalène)	CNGB1	Deletion	0	Clear
Progressive Retinal Atrophy (Discovered in the Shetland Sheepdog - BBS2 variant)	Pending	G>C	0	Clear
Progressive Retinal Atrophy (Discovered in the Shetland Sheepdog - CNGA1 variant)	CNGA1	Deletion	0	Clear
Progressive Retinal Atrophy (Discovered in the Swedish Vallhund)	MERTK	Insertion	0	Clear
Progressive Retinal Atrophy 1 (Discovered in the Italian Greyhound)	Pending	G>A	0	Clear
Progressive Retinal Atrophy Type III	FAM161A	Insertion	0	Clear
Protein Losing Nephropathy	NPHS1	G>A	0	Clear
Pyruvate Dehydrogenase Phosphatase 1 Deficiency	PDP1	C>T	0	Clear
Pyruvate Kinase Deficiency (Discovered in the Basenji)	PKLR	Deletion	0	Clear
Pyruvate Kinase Deficiency (Discovered in the Beagle)	PKLR	G>A	0	Clear
Pyruvate Kinase Deficiency (Discovered in the Pug)	PKLR	T>C	0	Clear
Pyruvate Kinase Deficiency (Discovered in the West Highland White Terrier)	PKLR	Insertion	0	Clear

Health Conditions Tested (continued)

Genetic Condition	Gene	Risk Variant	Copies	Result
QT Syndrome	KCNQ1	C>A	0	Clear
Renal Cystadenocarcinoma and Nodular Dermatofibrosis	FLCN	A>G	0	Clear
Rod-Cone Dysplasia 1	PDE6B	G>A	0	Clear
Rod-Cone Dysplasia 1a	PDE6B	Insertion	0	Clear
Rod-Cone Dysplasia 3	PDE6A	Deletion	0	Clear
Sensory Ataxic Neuropathy	tRNATyr	Deletion	0	Clear
Sensory Neuropathy	FAM134B	Insertion	0	Clear
Severe Combined Immunodeficiency	PRKDC	G>T	0	Clear
Severe Combined Immunodeficiency (Discovered in Frisian Water Dogs)	RAG1	G>T	0	Clear
Shaking Puppy Syndrome (Discovered in the Border Terrier)	Pending	G>A	0	Clear
Skeletal Dysplasia 2	COL11A2	G>C	0	Clear
Spinocerebellar Ataxia (Late-Onset Ataxia)	CAPN1	G>A	0	Clear
Spinocerebellar Ataxia with Myokymia and/or Seizures	KCNJ10	C>G	0	Clear
Spondylocostal Dysostosis	HES7	Deletion	0	Clear
Spongy Degeneration with Cerebellar Ataxia	SDCA1	T>C	0	Clear
Spongy Degeneration with Cerebellar Ataxia (Discovered in Belgian Malinois)	ATP1B2	Insertion	0	Clear
Stargardt Disease (Discovered in the Labrador Retriever)	ABCA4	Insertion	0	Clear
Trapped Neutrophil Syndrome	VPS13B	Deletion	0	Clear
Van den Ende-Gupta Syndrome	SCARF2	Deletion	0	Clear
von Willebrand's Disease, type 1	VWF	G>A	0	Clear
von Willebrand's Disease, type 2	VWF	T>G	0	Clear
von Willebrand's Disease, type 3 (Discovered in the Kooiker Hound)	VWF	G>A	0	Clear

Health Conditions Tested (continued)

Genetic Condition	Gene	Risk Variant	Copies	Result
von Willebrand's Disease, type 3 (Discovered in the Scottish Terrier)	VWF	Deletion	0	Clear
von Willebrand's Disease, type 3 (Discovered in the Shetland Sheepdog)	VWF	Deletion	0	Clear
X-Linked Ectodermal Dysplasia	EDA	G>A	0	Clear
X-Linked Hereditary Nephropathy (Discovered in the Navasota Dog)	COL4A5	Deletion	0	Clear
X-Linked Hereditary Nephropathy (Discovered in the Samoyed)	COL4A5	G>T	0	Clear
X-Linked Myotubular Myopathy	MTM1	C>A	0	Clear
X-Linked Progressive Retinal Atrophy 1	RPGR	Deletion	0	Clear
X-Linked Progressive Retinal Atrophy 2	RPGR	Deletion	0	Clear
X-Linked Severe Combined Immunodeficiency (Discovered in the Basset Hound)	IL2RG	Deletion	0	Clear
X-Linked Severe Combined Immunodeficiency (Discovered in the Cardigan Welsh Corgi)	IL2RG	Insertion	0	Clear
X-Linked Tremors	PLP1	A>C	0	Clear
Xanthinuria (Discovered in a mixed breed dog)	Pending	G>A	0	Clear
Xanthinuria (Discovered in the Cavalier King Charles Spaniel)	Pending	Deletion	0	Clear
Xanthinuria (Discovered in the Toy Manchester Terrier)	Pending	G>T	0	Clear

DNA Test Report

Coat Color

Genetic Trait	Gene	Variant	Copies	Result
Fawn	ASIP	a^y	**2**	**Fawn possible**
Recessive Black	ASIP	a	0	No effect
Tan Points	ASIP	a^t	0	No effect
Dominant Black	CBD103	K^B	0	No effect
Mask	MC1R	E^m	**2**	**Dark Muzzle possible**
Recessive Red (Variant 1)	MC1R	e^1	0	No effect
Widow's Peak (Discovered in the Afghan Hound and Saluki)	MC1R	E^G	0	No effect
Chocolate (Variant 1)	TYRP1	b^c	0	No effect
Chocolate (Variant 2)	TYRP1	b^s	0	No effect

Coat Patterns

Genetic Trait	Gene	Variant	Copies	Result
Piebald	MITF	s^p	0	No effect
Merle	PMEL	M	0	No effect
Harlequin	PSMB7	H	0	No effect
Saddle Tan	RALY	-	**2**	**Saddle possible**

Coat Length and Curl

Genetic Trait	Gene	Variant	Copies	Result
Long Hair (Variant 1)	FGF5	lh^1	0	No effect
Curly Coat	KRT71	C	0	No effect

Hairlessness

Genetic Trait	Gene	Variant	Copies	Result
Hairlessness (Discovered in the Chinese Crested Dog)	FOXI3	Hr^{cc}	0	No effect
Hairlessness (Discovered in the American Hairless Terrier)	SGK3	hr^{aht}	0	No effect
Hairlessness (Discovered in the Scottish Deerhound)	SKG3	hr^{sd}	0	No effect

More Coat Traits

Genetic Trait	Gene	Variant	Copies	Result
Hair Ridge	FGF3, FGF4, FGF19, ORAOV1	R	0	No effect
Reduced Shedding	MC5R	**sd**	**2**	**Low shedder**
Furnishings	RSPO2	F	0	No effect
Albino	SLC45A2	c^{al}	0	No effect

Head Shape

Genetic Trait	Gene	Variant	Copies	Result
Short Snout (Variant 2)	BMP3	**-**	**2**	**Shortened**
Short Snout (Variant 1)	SMOC2	**-**	**2**	**Short snout**

Hind Dewclaws

Genetic Trait	Gene	Variant	Copies	Result
Hind Dewclaws (Discovered in Asian breeds)	LMBR1	DC-1	0	No effect
Hind Dewclaws (Discovered in Western breeds)	LMBR1	DC-2	0	No effect

Body Features

Genetic Trait	Gene	Variant	Copies	Result
Back Muscle and Bulk	ACSL4	-	0	No effect
Blue Eyes	ALX4	-	0	No effect
High Altitude Adaptation	EPAS1	-	0	No effect
Short Legs	FGF4	-	0	Medium to long legs
Floppy Ears	MSRB3	-	1	**Partially floppy ears more likely**
Short Tail	T-box	T	0	Full tail length likely

UCDAVIS VETERINARY MEDICINE
Veterinary Genetics Laboratory

DOG COAT COLOR / NATURAL BOBTAIL TEST REPORT

Provided Information:	***Case:*** **NCD138758**
Name: **MADAME CHANEL CHARLOTTE BULLS**	***Date Received:*** 21-Jan-2021
Registration: **NP56445702**	***Report Issue Date:*** 04-Feb-2021
	Report ID: 7189-2520-4134-8075
	Verify report at www.vgl.ucdavis.edu/verify

DOB: **09/25/2019** *Sex:* **Female** *Breed:* **French Bulldog** *Color:* **Fawn**

Call Name: **Chanel**

Sire: SIR LYNCOLN RARE GERY BULLS	*Dam:* HIGLEY'S CHARLOTTE WEB
Reg: NP42787701	*Reg:* NP48775401
Microchip:	*Microchip:*

RESULT		INTERPRETATION
MC1R (E LOCUS)	**E^m/E^m**	2 copies of mask
BROWN (B LOCUS)	**B/B**	Does not carry brown - cannot have brown offspring
DILUTE (D LOCUS)	**d^1/d^1**	Dilute. 2 copies of the dilution variants.
DOMINANT BLACK (K LOCUS)	**N/N**	Dog does not have the dominant black mutation
AGOUTI (A LOCUS)	**a^y/a^y**	Homozygous for fawn/sable
MERLE	**N/N**	No copies of the merle associated SINE insertion.
PIEBALD (S LOCUS)	**N/N**	Dog has no copies of piebald.
HARLEQUIN (GREAT DANE)		Not requested.
NATURAL BOBTAIL		Not requested.
DOBERMAN OCA		Not requested.
GERMAN SHEPHERD PANDA SPOTTING		Not requested.
INTENSITY DILUTION	**In/In**	2 copies of intensity dilution. Red pigment is likely to be diluted to cream or white.

DOG COAT COLOR / NATURAL BOBTAIL TEST REPORT

Client/Owner/Agent Information:	*Case:*	**NCD138758**
SHERI QUINTON	*Date Received:*	21-Jan-2021
	Report Issue Date:	04-Feb-2021
	Report ID:	7189-2520-4134-8075
	Verify report at www.vgl.ucdavis.edu/verify	
Name: **MADAME CHANEL CHARLOTTE BULLS**		

Additional Information

If testing for a disease or a disorder was performed and results indicate the animal is affected or at risk, we recommend contacting your veterinarian for further clinical evaluation and for additional information on disease and management.

For more detailed information on Coat Color test results, please visit our website at:
www.vgl.ucdavis.edu/services/coatcolordog.php

For terms and conditions of testing, please see www.vgl.ucdavis.edu/about/terms-and-conditions

Results are determined using PCR-based methods. The results relate only to the sample tested as identified by the submitter (for example, identity and/or breed).

Report authorized by Dr. Rebecca Bellone, VGL Director

UCDAVIS VETERINARY MEDICINE
Veterinary Genetics Laboratory

ADDITIONAL INFORMATION FOR MERLE RESULTS

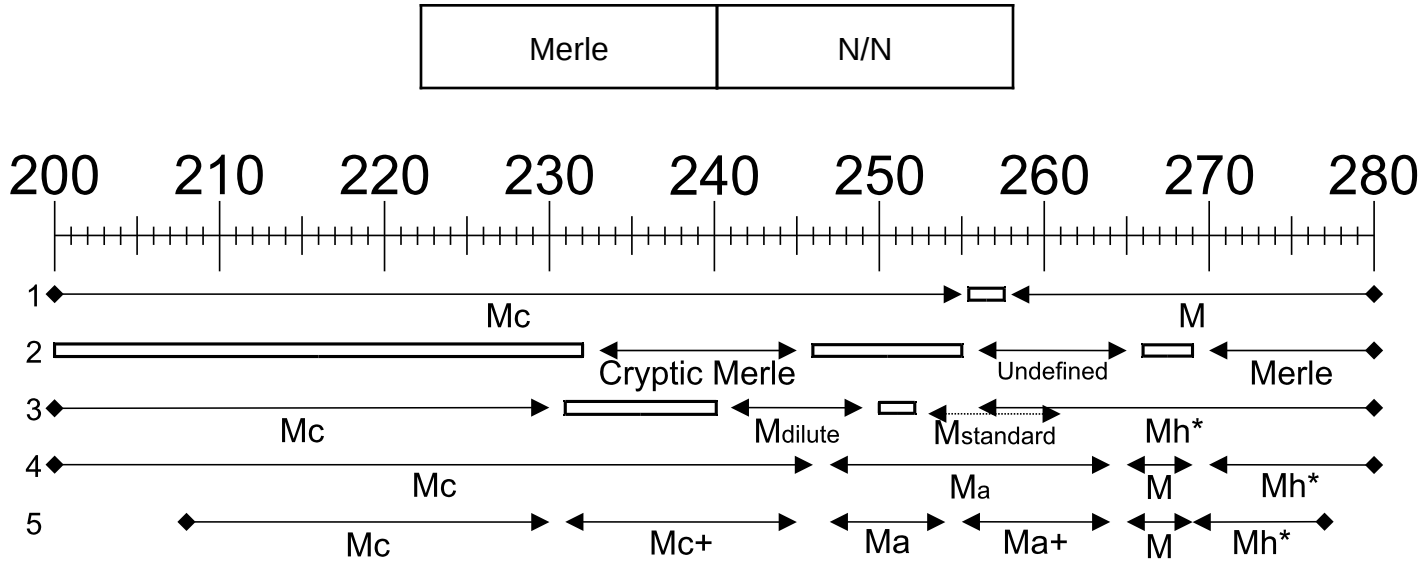
Provided Information:	***Case:*** **NCD138758**
Name: **MADAME CHANEL CHARLOTTE BULLS**	***Date Received:*** 21-Jan-2021
Registration: **NP56445702**	***Report Issue Date:*** 04-Feb-2021
	Report ID: 7189-2520-4134-8075
	Verify report at www.vgl.ucdavis.edu/verify

DOB: **09/25/2019** *Sex:* **Female** *Breed:* **French Bulldog** *Color:* **Fawn**

Call Name: **Chanel**

Sire: SIR LYNCOLN RARE GERY BULLS	*Dam:* HIGLEY'S CHARLOTTE WEB
Reg: NP42787701	*Reg:* NP48775401
Microchip:	*Microchip:*

Several interpretations and nomenclatures for the Merle variant have been proposed. Below is a graphical display of the merle alleles detected and the publications that define these nomenclatures.



Open boxes represent unassigned size variants within a specific naming system.

[1]Previous merle pattern result reported by the VGL.
Mc=200-255, M=258-280

[2]Merle pattern nomenclature defined by Clark et al. 2006.

[3]Merle pattern nomenclature defined by Murphy et al. 2018.
Mc=200-230, Mdilute=241-249, Mstandard=253-261, Mh=256-280

[4]Merle pattern nomenclature defined by Ballif et al. 2018.
Mc=200-246, Ma=247-264, M=265-269, Mh=270-280

[5]Merle pattern nomenclature defined by Langevin et al. 2018.
Mc=208-230, Mc+=231-245, Ma=247-254, Ma+=255-264, M=265-269, Mh=269-277

* Mh “harlequin” is not the true Great Dane Harlequin (H) identified by Clark et al. 2008.

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Veterinary Genetics Laboratory

COCOA TEST REPORT

Provided Information:	***Case:*** **NCD138758**
Name: **MADAME CHANEL CHARLOTTE BULLS**	***Date Received:*** 21-Jan-2021
Registration: **NP56445702**	***Report Issue Date:*** 04-Feb-2021
	Report ID: 2128-8518-4852-0124
	Verify report at www.vgl.ucdavis.edu/verify

DOB: **09/25/2019** *Sex:* **Female** *Breed:* **French Bulldog** *Color:* **Fawn**

Call Name: **Chanel**

Sire: SIR LYNCOLN RARE GERY BULLS	*Dam:* HIGLEY'S CHARLOTTE WEB
Reg: NP42787701	*Reg:* NP48775401
Microchip:	*Microchip:*

RESULT		INTERPRETATION
COCOA	**N/co**	Carrier of the cocoa variant.

COCOA TEST REPORT

Client/Owner/Agent Information:	*Case:*	**NCD138758**
SHERI QUINTON	*Date Received:*	21-Jan-2021
	Report Issue Date:	04-Feb-2021
	Report ID:	2128-8518-4852-0124
	Verify report at www.vgl.ucdavis.edu/verify	
Name: **MADAME CHANEL CHARLOTTE BULLS**		

Additional Information

If testing for a disease or a disorder was performed and results indicate the animal is affected or at risk, we recommend contacting your veterinarian for further clinical evaluation and for additional information on disease and management.

For more detailed information on Cocoa test results, please visit our website at:
www.vgl.ucdavis.edu/test/cocoa-dog

This test is specific for the autosomal recessive variant causing cocoa in French Bulldogs and is distinct from the other known variants resulting in a brown phenotype

For terms and conditions of testing, please see www.vgl.ucdavis.edu/about/terms-and-conditions

Results are determined using PCR-based methods. The results relate only to the sample tested as identified by the submitter (for example, identity and/or breed).

Report authorized by Dr. Rebecca Bellone, VGL Director