

DogCheck 2.1 and 3.0 Items Tested				
Category	Gene(s)	Diseases & coat colors & body characteristics	V2.1	V3.0
Coat color	ASIP	A Locus (Agouti) - a	x	x
Coat color	ASIP	A Locus (Agouti) - a <sup>w</sup> /a <sup>t</sup>	x	x
Coat color	ASIP	A Locus (Agouti) - a A Locus (Agouti) - A <sup>y</sup>	x	x
Disease	GDNF	Acral Mutilation Syndrome		x
Disease	ANLN	Acute Respiratory Distress Syndrome		x
Disease	SLC19A3	Alaskan Husky Encephalopathy	x	x
Disease	NDRG1	Alaskan Malamute Polyneuropathy	x	x
Disease	ENAM	Amelogenesis Imperfecta	x	x
Coat color	RALY	As Locus (Saddle Tan)		x
Coat color	TYRP1	B Locus (Brown) - b <sup>a</sup>	x	x
Coat color	TYRP1	B Locus (Brown) - b <sup>c</sup>	x	x
Coat color	TYRP1	B Locus (Brown) - b <sup>d</sup>	x	x
Coat color	TYRP1	B Locus (Brown) - b <sup>s</sup>	x	x
Disease	LGI2	Benign Familial Juvenile Epilepsy	x	x
Morphology	BMP3	Brachycephaly	x	x
Disease	SERAC1	Canine Multiple System Degeneration (Chinese Crested Type)	x	x
Disease	SERAC1	Canine Multiple System Degeneration (Kerry Blue Terrier Type)	x	x
Disease	ANO6	Canine Scott Syndrome		x
Morphology	FGF4	Chondrodysplasia	x	x
Disease	ITGA10	Chondrodysplasia (Karelian Bear Dog and Norwegian Elkhound Type)	x	x
Disease	FGF4	Intervertebral Disc Disease and Chondrodyostrophy		x
Disease	NHEJ1	Collie Eye Anomaly	x	x
Disease	CNGB3	Cone Degeneration	x	x
Disease	CNGB3	Cone Degeneration (German Shorthaired Pointer Type)	x	x
Disease	CNGA3	Cone Degeneration (German Shepherd Dog Type)		x
Disease	CNGA3	Cone Degeneration (Labrador Retriever Type)		x
Disease	SLC37A2	Craniomandibular Osteopathy		x
Coat Texture	KRT71	Cu Locus (Curly Hair)	x	x
Disease	SLC3A1	Cystinuria (Australian Cattle Dog typ)	x	x
Disease	SLC3A1	Cystinuria (Labrador Retriever Typ)	x	x
Disease	SLC3A1	Cystinuria (Newfoundland Typ)	x	x
Disease	SLC7A9	Cystinuria (Miniature Pinscher Typ)	x	x
Disease	SLC7A9	Cystinuria Typ 3 (Bulldog Typ Risk Factor, Variant 3)		x
Disease	SLC3A1	Cystinuria Typ 3 (Bulldog Typ Risk Factor, Variants 1 and 2)		x
Coat color	MLPH	D Locus (Dilute) - d <sup>1</sup>	x	x
Coat color	MLPH	D Locus (Dilute) - d <sup>2</sup>	x	x
Disease	VLDLR	Dandy-Walker-Like Malformation		x
Disease	SOD1	Degenerative Myelopathy (Bernese Mountain Dog Variant)		x
Disease	SOD1	Degenerative Myelopathy (Common Variant)	x	x
Disease	SP110	Degenerative Myelopathy Modifier (Pembroke Welsh Corgi Typ)	x	x
Disease	FAM20C	Dental Hypomineralization		x
Disease	INPP5E	Diffuse Cystic Renal Dysplasia and Hepatic Fibrosis		x
Disease	PDK4	Dilated Cardiomyopathy (Doberman Pinscher Typ Risk Factor, Variant 1)	x	x
Disease	TTN	Dilated Cardiomyopathy (Doberman Pinscher Typ Risk Factor, Variant 2)		x
Disease	RBM20	Dilated Cardiomyopathy (Schnauzer Type)		x
Disease	FAM83H	Dry Eye Curly Coat Syndrome	x	x
Disease	COL7A1	Dystrophic Epidermolysis Bullosa	x	x
Coat color	MC1R	E Locus (Yellow/Red)	x	x
Coat color	MC1R	Eg Locus (Grizzle, Afghan Hound Type)	x	x
Coat color	MC1R	Eh Locus (Sable, Cocker Spaniel Type)		x
Disease	TNXB	Ehlers-Danlos Syndrome (Variant 1)		x
Disease	TNXB	Ehlers-Danlos Syndrome (Variant 2)		x
Disease	PKP1	Ectodermal Dysplasia (Chesapeake Bay Retriever Type)	x	x
Disease	EDA	Ectodermal Dysplasia, X-Linked (Dachshund Type)		x
Disease	EDA	Ectodermal Dysplasia, X-Linked (Shepherd Type)	x	x
Disease	SPTB	Elliptocytosis	x	x
Coat color	MC1R	Em Locus (Melanistic Mask)	x	x
Disease	KRT10	Epidermolytic Hyperkeratosis	x	x
Disease	BCAN	Episodic Falling Syndrome	x	x
Disease	DNM1	Exercise-Induced Collapse	x	x
Disease	F7	Coagulation Factor VII Deficiency	x	x
Disease	F11	Factor XI Deficiency		x
Disease	COL4A4	Familial Nephropathy (Cocker Spaniel Type)	x	x
Disease	COL4A4	Familial Nephropathy (English Springer Spaniel Type)	x	x
Disease	STK38L	Early Retinal Degeneration	x	x
Disease	FUCA1	Fucosidosis		x
Disease	ABCB4	Gallbladder Mucoceles	x	x
Disease	ADAMTS20	Cleft Palate and Syndactyly (Nova Scotia Duck Tolling Retriever Type)		x
Coat color	AMELXY	Sex Determination - X	x	x

Coat color	ZFXY	Sex Determination - Y	x	x
Disease	ITGA2B	Glanzmann's Thrombasthenia (Otterhound Type)	x	x
Disease	ITGA2B	Glanzmann's Thrombasthenia (Great Pyrenees Type)	x	x
Disease	OLFML3	Glaucoma (Border Collie Type)		x
Disease	GALC	Globoid Cell Leukodystrophy (Irish Setter Type)	x	x
Disease	GALC	Globoid Cell Leukodystrophy (Terrier Type)	x	x
Disease	PFKM	Glycogen Storage Disease VII, PFK Deficiency	x	x
Disease	G6PC	Glycogen Storage Disease Ia	x	x
Disease	AGL	Glycogen Storage Disease IIIa	x	x
Disease	GAA	Pompe Disease	x	x
Disease	PFKM	Glycogen Storage Disease VII (Wachtelhund Type)	x	x
Disease	GLB1	GM1 Gangliosidosis (Alaskan Husky Type)	x	x
Disease	GLB1	GM1 Gangliosidosis (Portuguese Water Dog Type)	x	x
Disease	GLB1	GM1 Gangliosidosis (Shiba Inu Type)	x	x
Disease	HEXA	GM2 Gangliosidosis (Japanese Chin Type)	x	x
Disease	HEXB	GM2 Gangliosidosis (Poodle Type)	x	x
Disease	NDRG1	Greyhound Polyneuropathy	x	x
Coat color	PSMB7	H Locus (Harlequin, Great Dane Type)	x	x
Disease	F8	Hemophilia A (Boxer Type)	x	x
Disease	F8	Hemophilia A (German Shepherd Dog, Type 1)	x	x
Disease	F8	Hemophilia A (German Shepherd Dog, Type 2)	x	x
Disease	F9	Hemophilia B (Cairn Terrier Type)	x	x
Disease	F9	Hemophilia B (Lhasa Apso Type)	x	x
Disease	F9	Hemophilia B (Rhodesian Ridgeback Type)	x	x
Disease	FAM83G	Hereditary Footpad Hyperkeratosis (Irish Terrier and Kromfohrländer Type)	x	x
Disease	SUV39H2	Hereditary Nasal Parakeratosis (Greyhound Type)		x
Disease	SUV39H2	Hereditary Nasal Parakeratosis	x	x
Disease	COL4A5	Hereditary Nephritis (Samoyed Type)	x	x
Disease	HSF4	Hereditary Cataracts	x	x
Disease	HSF4	Hereditary Cataracts (Australian Shepherd Type)	x	x
Coat Texture	FOXI3	Hr Locus (FOXI3 Hairless Gene Test, Mexican Hairless, Peruvian Hairless and Chinese Crested Type)	x	
Disease	SLC6A5	Startle Disease	x	x
Disease	SLC2A9	Hyperuricosuria	x	x
Disease	FNIP2	Hypomyelination (Weimaraner Type)		x
Coat color	MFSD12	I Locus (Intensity)		x
Coat color	RSPO2	IC Locus (Improper Coat/Furnishings)		x
Disease	NIPAL4	Ichthyosis (American Bulldog Type)	x	x
Disease	SLC27A4	Ichthyosis (Great Dane Type)		x
Disease	PNPLA1	Ichthyosis (Golden Retriever Type)	x	x
Disease	CUBN	Intestinal Cobalamin Malabsorption (Beagle Type)	x	x
Disease	CUBN	Intestinal Cobalamin Malabsorption (Border Collie Type)	x	x
Disease	AKNA	Recurrent Inflammatory Pulmonary Disease		x
Disease	RAB3GAP1	Juvenile Laryngeal Paralysis and Polyneuropathy	x	x
Disease	DIRAS1	Juvenile Myoclonic Epilepsy (Rhodesian Ridgeback Type)	x	x
Coat color	CBD103	K Locus (Dominant Black)	x	x
Disease	CAT	Catalase Deficiency		x
Disease	C3	Complement 3 Deficiency	x	x
Disease	CYB5R3	Congenital Methemoglobinemia		x
Disease	RPE65	Congenital Stationary Night Blindness	x	x
Disease	TPO	Congenital Hypothyroidism with Goiter (Terrier Type)		x
Disease	CHRNE	Congenital Myasthenic Syndrome (Jack Russell Terrier Type)		x
Disease	COLQ	Congenital Myasthenic Syndrome (Labrador Retriever Type)	x	x
Disease	CHAT	Congenital Myasthenic Syndrome (Old Danish Pointer Type)	x	x
Coat color	FGF5	L Locus (Long Hair/Fluffy) - Lh^1	x	x
Coat color	FGF5	L Locus (Long Hair/Fluffy) - Lh^2	x	x
Disease	L2HGDH	L-2-Hydroxyglutaric Aciduria (Staffordshire Bull Terrier Type)	x	x
Disease	MLKN1	Lethal Acrodermatitis		x
Disease	ITGB2	Leukocyte Adhesion Deficiency, Type I	x	x
Disease	FERMT3	Leukocyte Adhesion Deficiency, Type III	x	x
Disease	LEPREL1	Lundehund Syndrome		x
Disease	ATG4D	Lagotto Storage Disorder		x
Coat color	PMEL	M Locus (Merle)		x
Disease	CHST6	Macular Corneal Dystrophy (Labrador Retriever Type)		x
Disease	MYH9	May-Hegglin Anomaly	x	x
Disease	PLG	Ligneous Membranitis	x	x
Disease	IDUA	Mucopolysaccharidosis I	x	x
Disease	SGSH	Mucopolysaccharidosis IIIA (Dachshund Type)	x	x
Disease	SGSH	Mucopolysaccharidosis IIIA (New Zealand Huntaway Type)	x	x
Disease	GUSB	Mucopolysaccharidosis VII (Shepherd Type)	x	x
Disease	ABCB1	Multidrug Resistance 1	x	x
Disease	BEST1	Multifocal Retinopathy 1	x	x
Disease	BEST1	Multifocal Retinopathy 2	x	x

Disease	BEST1	Multifocal Retinopathy 3	x	x
Disease	DMD	Muscular Dystrophy (Golden Retriever Type)	x	x
Disease	ADAMTS2	Musladin-Lueke Syndrome	x	x
Disease	BIN1	Inherited Myopathy of Great Danes	x	x
Disease	MSTN	Myostatin Deficiency (Whippet and Longhaired Whippet Type)	x	x
Disease	CLCN1	Myotonia Congenita (Australian Cattle Dog Type)	x	x
Disease	CLCN1	Myotonia Congenita (Schnauzer Type)	x	x
Disease	MTM1	Myotubular Myopathy 1	x	x
Disease	MTM1	Myotubular Myopathy 1 (Rottweiler Type)		x
Disease	HCRT2	Narcolepsy (Dachshund Type)	x	x
Disease	HCRT2	Narcolepsy (Doberman Pinscher Type)	x	x
Disease	HCRT2	Narcolepsy (Labrador Retriever Type)	x	x
Disease	ATF2	Neonatal Encephalopathy with Seizures	x	x
Disease	SPTBN2	Neonatal Cerebellar Cortical Degeneration	x	x
Disease	VPS11	Neuroaxonal Dystrophy (Rottweiler Type)		x
Disease	TECPR2	Neuroaxonal Dystrophy (Spanish Water Dog Type)		x
Disease	ATP13A2	Neuronal Ceroid Lipofuscinosis (Tibetan Terrier Type)	x	x
Disease	PPT1	Neuronal Ceroid Lipofuscinosis 1	x	x
Disease	PPT1	Neuronal Ceroid Lipofuscinosis 1 (Cane Corso Type)	x	x
Disease	CTSD	Neuronal Ceroid Lipofuscinosis 10	x	x
Disease	ATP13A2	Neuronal Ceroid Lipofuscinosis 12		x
Disease	TPP1	Neuronal Ceroid Lipofuscinosis 2	x	x
Disease	ARSG	Neuronal Ceroid Lipofuscinosis 4A	x	x
Disease	CLN5	Neuronal Ceroid Lipofuscinosis 5 (Australian Cattle Dog/Border Collie Type)	x	x
Disease	CLN5	Neuronal Ceroid Lipofuscinosis 5 (Golden Retriever Type)		x
Disease	CLN6	Neuronal Ceroid Lipofuscinosis 6	x	x
Disease	MFSD8	Neuronal Ceroid Lipofuscinosis 7		x
Disease	CLN8	Neuronal Ceroid Lipofuscinosis 8 (Australian Shepherd Type)	x	x
Disease	CLN8	Neuronal Ceroid Lipofuscinosis 8 (Setter Type)	x	x
Disease	FLCN	Renal Cystadenocarcinoma and Nodular Dermatofibrosis	x	x
Disease	SLC45A2	Oculocutaneous Albinism		x
Disease	SLC45A2	Oculocutaneous Albinism (Small Breed Type)		x
Disease	SLC13A1	Osteochondrodysplasia		x
Disease	COL1A2	Osteogenesis Imperfecta (Beagle Type)	x	x
Disease	SERPINH1	Osteogenesis Imperfecta (Dachshund Type)	x	x
Disease	COL1A1	Osteogenesis Imperfecta (Golden Retriever Type)	x	x
Disease	P2RY12	P2RY12 Receptor Platelet Disorder	x	x
Disease	PIGN	Adult Paroxysmal Dyskinesia		x
Disease	DMD	Pembroke Welsh Corgi Duchenne Muscular Dystrophy	x	x
Disease	AMHR2	Persistent Müllerian Duct Syndrome	x	x
Morphology	LMBR1	Polydactyly	x	x
Disease	RAB3GAP1	Polyneuropathy with Ocular Abnormalities and Neuronal Vacuolation		x
Disease	ARHGEF10	Polyneuropathy (Leonberger and Saint Bernard Type)	x	x
Disease	GJA9	Polyneuropathy (Leonberger Type 2)	x	x
Disease	KLKB1	Prekallikrein Deficiency	x	x
Disease	AGXT	Primary Hyperoxaluria	x	x
Disease	ADAMTS17	Primary Lens Luxation	x	x
Disease	CCDC39	Primary Ciliary Dyskinesia	x	x
Disease	ADAMTS17	Primary Open Angle Glaucoma and Primary Lens Luxation (Shar Pei Type)		x
Disease	ADAMTS17	Primary Open Angle Glaucoma (Basset Fauve de Bretagne Type)		x
Disease	ADAMTS10	Primary Open Angle Glaucoma	x	x
Disease	ADAMTS10	Primary Open Angle Glaucoma (Norwegian Elkhound Type)		x
Disease	ADAMTS17	Primary Open Angle Glaucoma (Basset Hound Type)		x
Disease	SAG	Progressive Retinal Atrophy (Basenji Type)	x	x
Disease	CNGB1	Progressive Retinal Atrophy, PRA1 (Papillon Type)	x	x
Disease	NECAP1	Progressive Retinal Atrophy (Giant Schnauzer Type)		x
Disease	CNGA1	Progressive Retinal Atrophy (Shetland Sheepdog Type)		x
Disease	FAM161A	Progressive Retinal Atrophy, PRA3 (Tibetan Terrier and Spaniel Type)		x
Disease	NPHP4	Progressive Retinal Atrophy, Cone-Rod Dystrophy	x	x
Disease	PDE6B	Progressive Retinal Atrophy, Cone-Rod Dystrophy 1	x	x
Disease	IQCB1	Progressive Retinal Atrophy, Cone-Rod Dystrophy 2		x
Disease	ADAM9	Progressive Retinal Atrophy, Cone-Rod Dystrophy 3	x	x
Disease	RPGRIP1	Progressive Retinal Atrophy, Cone-Rod Dystrophy 4 (crd4/cord1)		x
Disease	RHO	Progressive Retinal Atrophy (Bullmastiff/Mastiff Type)	x	x
Disease	CCDC66	Progressive Retinal Atrophy, Generalized	x	x
Disease	SLC4A3	Progressive Retinal Atrophy, Golden Retriever 1	x	x
Disease	TTC8	Progressive Retinal Atrophy, Golden Retriever 2	x	x
Disease	PRCD	Progressive Retinal Atrophy, Progressive Rod-Cone Degeneration (prcd)	x	x
Disease	PDE6B	Progressive Retinal Atrophy (Irish Setter Type)	x	x
Disease	PDE6B	Progressive Retinal Atrophy (Sloughi Type)	x	x
Disease	PDE6A	Progressive Retinal Atrophy, Rod-Cone Dysplasia 3	x	x
Disease	C2ORF71	Progressive Retinal Atrophy, Rod-Cone Dysplasia 4		x

Disease	RPGR	Progressive Retinal Atrophy, X-Linked 1		x
Disease	KIRREL2	Protein Losing Nephropathy - Variant 1		x
Disease	NPHS1	Protein Losing Nephropathy - Variant 2		x
Disease	PDP1	Pyruvate Dehydrogenase Deficiency	x	x
Disease	PKLR	Pyruvate Kinase Deficiency (Basenji Type)	x	x
Disease	PKLR	Pyruvate Kinase Deficiency (Beagle Type)	x	x
Disease	PKLR	Pyruvate Kinase Deficiency (Labrador Retriever Type)	x	x
Disease	PKLR	Pyruvate Kinase Deficiency (Pug Type)	x	x
Disease	PKLR	Pyruvate Kinase Deficiency (Terrier Type)	x	x
Disease	COL9A3	Retinal Dysplasia/Oculoskeletal Dysplasia 1		x
Disease	COL9A2	Retinal Dysplasia/Oculoskeletal Dysplasia 2		x
Coat color	MITF	S Locus (White Spotting, Parti, or Piebald)		x
Disease	PRKDC	Severe Combined Immunodeficiency Disease (Terrier Type)	x	x
Disease	RAG1	Severe Combined Immunodeficiency Disease (Wetterhoun Type)	x	x
Disease	IL2RG	Severe Combined Immunodeficiency Disease, X-Linked (Basset Hound Type)	x	x
Disease	IL2RG	Severe Combined Immunodeficiency Disease, X-Linked (Corgi Type)	x	x
Coat color	MC5R	SD Locus (Shedding)	x	x
Disease	FAM134B	Sensory Neuropathy (Border Collie Type)		x
Disease	MTBP	Shar-Pei Autoinflammatory Disease	x	x
Disease	COL11A2	Skeletal Dysplasia 2	x	x
Disease	NKX2-8	Spinal Dysraphism	x	x
Disease	KCNJ10	Spinocerebellar Ataxia	x	x
Disease	CAPN1	Late Onset Ataxia	x	x
Disease	HES7	Spondylocostal Dysostosis		x
Disease	ABCA4	Stargardt Disease		x
Morphology	T	T Locus (Natural Bobtail)	x	x
Disease	RASGRP1	Thrombopathia (American Eskimo Dog Type)	x	x
Disease	RASGRP1	Thrombopathia (Basset Hound Type)	x	x
Disease	RASGRP1	Thrombopathia (Newfoundland Type)	x	x
Disease	VPS13B	Trapped Neutrophil Syndrome	x	x
Disease	APRT	Urolithiasis (Native American Indian Dog Type)		x
Disease	SCARF2	Van Den Ende-Gupta Syndrome		x
Disease	VWF	Von Willebrand Disease I	x	x
Disease	VWF	Von Willebrand Disease II	x	x
Disease	VWF	Von Willebrand Disease III (Kooikerhondje Type)	x	x
Disease	VWF	Von Willebrand Disease III (Scottish Terrier Type)	x	x
Disease	VWF	Von Willebrand Disease III (Shetland Sheepdog Type)	x	x
Disease	PTPLA	Centronuclear Myopathy		x
Disease	SEL1L	Cerebellar Ataxia (Finnish Hound Type)	x	x
Disease	RAB24	Cerebellar Degeneration		x
Disease	SNX14	Cerebellar Cortical Degeneration		x
Disease	AP3B1	Cyclic Neutropenia	x	x
			<b>180</b>	<b>255</b>