

Retinal mutations by breed

Breed	Disease	Disease_designation	Gene_name
American Bulldog	Canine multi-focal retinopathy	CMR1	BEST1
	Progressive retinal atrophy	PRA_RCD1	PDE6B
American Cocker Spaniel	Progressive retinal atrophy	PRA_PRC	PRCD*
American Eskimo Dog	Progressive retinal atrophy	PRA_PRC	PRCD*
American Pit Bull Terrier	Canine multi-focal retinopathy	CMR1	BEST1
	Progressive retinal atrophy	PRA_CRD2	IQCB1
American Staffordshire Bull Terrier	Progressive retinal atrophy	PRA_RCD1	PDE6B
	Progressive retinal atrophy	PRA_CRD2	IQCB1
Anatolian Shepherd Dog	Canine multi-focal retinopathy	CMR1	BEST1
Australian Cattle Dog	Progressive retinal atrophy	PRA_PRC	PRCD*
Australian Shepherd	Progressive retinal atrophy	PRA_PRC	PRCD*
Australian Silky Terrier	Progressive retinal atrophy	PRA_PRC	PRCD*
Australian Stumpy Tailed Cattle Dog	Progressive retinal atrophy	PRA_PRC	PRCD*
Barbet	Progressive retinal atrophy	PRA_PRC	PRCD*
Basenji	Progressive retinal atrophy	PRA_BAS	SAG
Beagle	Progressive retinal atrophy	PRA_CRD4	RPGRIP1
Boerboel	Canine multi-focal retinopathy	CMR1	BEST1
Bolognese	Progressive retinal atrophy	PRA_PRC	PRCD*
Bolonka Zvetna	Progressive retinal atrophy	PRA_PRC	PRCD*
Brazilian Terrier	Canine multi-focal retinopathy	CMR1	BEST1
Bull Mastiff	Canine multi-focal retinopathy	CMR1	BEST1
	Progressive retinal atrophy	DPRA	RHO
Bulldog	Canine multi-focal retinopathy	CMR1	BEST1
Cane Corso	Canine multi-focal retinopathy	CMR1	BEST1
Chesapeake Bay Retriever	Progressive retinal atrophy	PRA_PRC	PRCD*
Chihuahua	Progressive retinal atrophy	PRA_CRD4	RPGRIP1
	Progressive retinal atrophy	PRA_PRC	PRCD*
Chinese Crested	Progressive retinal atrophy	PRA_RCD4	C2ORF71
	Progressive retinal atrophy	PRA_PRC	PRCD*
	Progressive retinal atrophy	PRA_RCD3	PDE6A
Cockapoo	Progressive retinal atrophy	PRA_PRC	PRCD*
Cocker Spaniel	Progressive retinal atrophy	PRA_PRC	PRCD*
	Progressive retinal atrophy	PRA_CRD4	RPGRIP1
	Retinal Dysplasia	RD	NDP
Coton De Tulear	Canine multi-focal retinopathy	CMR2	BEST1
	Progressive retinal atrophy	PRA_PRC	PRCD*
Cross Breed	Progressive retinal atrophy	XL_PRA1	RPGR
Curly Coated Retriever	Progressive retinal atrophy	PRA_CRD4	RPGRIP1
Dogue de Bordeaux	Canine multi-focal retinopathy	CMR1	BEST1
English Setter	Progressive retinal atrophy	PRA_RCD4	C2ORF71
English Springer Spaniel	Progressive retinal atrophy	PRA_CRD4	RPGRIP1
Entlebucher Sennenhund	Progressive retinal atrophy	PRA_PRC	PRCD*

Breed	Disease	Disease_designation	Gene_name
Field Spaniel	Progressive retinal atrophy	PRA_PRC4	PRCD*
	Progressive retinal atrophy	PRA_CRD4	RPGRIP1
Finnish Lapphund	Canine multi-focal retinopathy	CMR3	BEST1
	Progressive retinal atrophy	PRA_PRC4	PRCD*
French Bull Dog	Canine multi-focal retinopathy	CMR1	BEST1
	Progressive retinal atrophy	PRA_CRD4	RPGRIP1
German Spitz (Giant)	Progressive retinal atrophy	PRA	NECAP1
German Spitz (Klein)	Progressive retinal atrophy	PRA_CRD4	RPGRIP1
	Progressive retinal atrophy	PRA	NECAP1
German Spitz (Mittel)	Progressive retinal atrophy	PRA	NECAP1
Giant Schnauzer	Progressive retinal atrophy	PRA_PRC4	PRCD*
	Progressive retinal atrophy	PRA	NECAP1
Glen of Imaal Terrier	Progressive retinal atrophy	PRA_CRD3	ADAM9
Golden Retriever	Progressive retinal atrophy	GR-PRA1	SLC4A3
	Progressive retinal atrophy	GR-PRA2	TTC8
	Progressive retinal atrophy	PRA_PRC4	PRCD*
Goldendoodle	Progressive retinal atrophy	GR-PRA1	SLC4A3
	Progressive retinal atrophy	GR-PRA2	TTC8
	Progressive retinal atrophy	PRA_PRC4	PRCD*
Gordon Setter	Progressive retinal atrophy	PRA_RCD4	C2ORF71
Griffon bruxellois	Progressive retinal atrophy	PRA_PAP1	CNGB1
Hairless terrier (American)	Progressive retinal atrophy	PRA_PRC4	PRCD*
Hungarian Puli	Progressive retinal atrophy	PRA_PRC4	PRCD*
	Progressive retinal atrophy	PRA_BBS4	BBS4
Irish Red and White Setter	Progressive retinal atrophy	PRA_RCD1	PDE6B
Irish Setter	Progressive retinal atrophy	PRA_RCD4	C2ORF71
	Progressive retinal atrophy	PRA_RCD1	PDE6B
Jack Russell Terrier	Progressive retinal atrophy	PRA_PRC4	PRCD*
Japanese Chin	Progressive retinal atrophy	PRA_PRC4	PRCD*
Karelian Bear Dog	Progressive retinal atrophy	PRA_PRC4	PRCD*
Kuvasz	Progressive retinal atrophy	PRA_PRC4	PRCD*
Labradoodle	Progressive retinal atrophy	PRA_PRC4	PRCD*
Labrador Retriever	Progressive retinal atrophy	PRA_CRD4	RPGRIP1
	Progressive retinal atrophy	PRA_PRC4	PRCD*
Labrador Retriever Cross	Progressive retinal atrophy	PRA_CRD3	ADAM9
	Progressive retinal atrophy	GR-PRA2	TTC8
	Progressive retinal atrophy	GR-PRA1	SLC4A3
	Stargardt macular degeneration	STGD	ABCA4
Lagotto Romagnolo	Progressive retinal atrophy	PRA_PRC4	PRCD*
Lancashire Heeler	Progressive retinal atrophy	PRA_PRC4	PRCD*
Lapponian Herder	Canine multi-focal retinopathy	CMR3	BEST1
	Progressive retinal atrophy	PRA	IFT122
	Progressive retinal atrophy	PRA_PRC4	PRCD*

Breed	Disease	Disease_designation	Gene_name
Lhasa Apso	Progressive retinal atrophy	GR-PRA1	SLC4A3
	Progressive retinal atrophy	PRA4	IMPG2
Long-Haired Dachshund (Standard)	Progressive retinal atrophy	PRA_CRD4	RPGRIP1
Manchester Terrier	Progressive retinal atrophy	PRA_PRCD	PRCD*
Markiesje	Progressive retinal atrophy	PRA_PRCD	PRCD*
Mastiff	Canine multi-focal retinopathy	CMR1	BEST1
	Progressive retinal atrophy	DPRA	RHO
Mexican Hairless Dog (Xoloitzcuintli)	Progressive retinal atrophy	PRA_PRCD	PRCD*
Mi-Ki	Progressive retinal atrophy	PRA_PRCD	PRCD*
Minature Smooth Haired Dachshund	Progressive retinal atrophy	PRA_CRD4	RPGRIP1
Miniature American Shepherd	Canine multi-focal retinopathy	CMR1	BEST1
Miniature Australian Shepherd	Progressive retinal atrophy	PRA_PRCD	PRCD*
Miniature Long-haired Dachshund	Progressive retinal atrophy	PRA	NECAP1
	Progressive retinal atrophy	PRA_CRD4	RPGRIP1
	Retinal degeneration	Early Onset Retinal Deg	MAP9
Miniature Poodle	Progressive retinal atrophy	PRA_PRCD	PRCD*
Miniature Schnauzer	Progressive retinal atrophy	GR-PRA1	SLC4A3
	Progressive retinal atrophy	PRA_PPT1	PPT1
	Progressive retinal atrophy	Type 1 PRA	PDC
	Progressive retinal atrophy	PRA_PPT1	PPT1
	Progressive retinal atrophy	PRA Type1	HIVEP3
Miniature Wire Haired Dachshund	Progressive retinal atrophy	PRA_CRD4	RPGRIP1
	Progressive retinal atrophy	PRA_CRD	NPHP4
Norrbottenspets	Progressive retinal atrophy	PRA_PRCD	PRCD*
Norwegian Elkhound	Early retinal degeneration	ERD	STK38L
	Progressive retinal atrophy	PRA_PRCD	PRCD*
Nova Scotia Duck Tolling Retrievers	Progressive retinal atrophy	PRA_PRCD	PRCD*
Old Danish Pointer	Progressive retinal atrophy	PRA_RCD4	C2ORF71
Papillon	Progressive retinal atrophy	PRA_PAP1	CNGB1
Perro de Presa Canario	Canine multi-focal retinopathy	CMR1	BEST1
Phalene	Progressive retinal atrophy	PRA_PAP1	CNGB1
Plott (Hound)	Progressive retinal atrophy	PRA_PRCD	PRCD*
Polish Lowland Sheepdog (polski owcz)	Progressive retinal atrophy	PRA_RCD4	C2ORF71
Polish Tatra Sheepdog	Progressive retinal atrophy	PRA_RCD4	C2ORF71
Pomeranian	Progressive retinal atrophy	PRA_PRCD	PRCD*
	Progressive retinal atrophy	PRA	NECAP1
	Progressive retinal atrophy	PRA_RCD3	PDE6A
Portuguese Podengo Pequeno (small)	Progressive retinal atrophy	PRA_PRCD	PRCD*
Portuguese Water Dog	Progressive retinal atrophy	EOPRA	CCDC66
	Progressive retinal atrophy	PRA_PRCD	PRCD*
Pyrenean Mountain dog	Canine multi-focal retinopathy	CMR1	BEST1
Rat Terrier	Progressive retinal atrophy	PRA_PRCD	PRCD*

Breed	Disease	Disease_designation	Gene_name
Rough Collie	Progressive retinal atrophy	RCD2	RD3
Russian Black Terrier	Progressive retinal atrophy	PRA_PRC	PRCD*
Russian-European Laika	Progressive retinal atrophy	PRA_PRC	PRCD*
Samoyed	Progressive retinal atrophy	XL_PRA2	RPGR
Schapendoes (Dutch)	Progressive retinal atrophy	Gpra	CCDC66
Schipperke	Progressive retinal atrophy	PRA_PRC	PRCD*
Serbian Hound	Progressive retinal atrophy	PRA_PRC	PRCD*
Shetland Sheepdogs	Progressive retinal atrophy	PRA_CN	CN
	Progressive retinal atrophy	PRA_BBS2	BBS2
Siberian Husky	Progressive retinal atrophy	XL_PRA2	RPGR
Sloughie (Arabian Greyhound)	Progressive retinal atrophy	PRA_RCD1	PDE6B
Smooth Collie	Progressive retinal atrophy	RCD2	RD3
Smooth Haired Dachshund (Standard)	Progressive retinal atrophy	PRA_CRD4	RPGRIP1
Soft-coated Wheaten Terrier	Progressive retinal atrophy	PRA_CRD3	ADAM9
Spanish Water Dog	Progressive retinal atrophy	PRA_PRC	PRCD*
Spitz	Progressive retinal atrophy	PRA_RCD1	PDE6B
	Progressive retinal atrophy	PRA	PDC
	Progressive retinal atrophy	PRA	PDC
	Progressive retinal atrophy	PRA	PDC
	Progressive retinal atrophy	PRA	PDC
Standard Poodle	Progressive retinal atrophy	PRA_PRC	PRCD*
	Progressive retinal atrophy	PRA_RCD4	C2ORF71
Swedish Elkhound	Progressive retinal atrophy	PRA_PRC	PRCD*
Swedish Lapphund	Progressive retinal atrophy	PRA_PRC	PRCD*
Swedish Vallhund	Progressive retinal atrophy	PRA_MERTK	MERTK
Tibetan Spaniel	Progressive retinal atrophy	PRA3	FAM161A
Tibetan Terrier	Progressive retinal atrophy	PRA_PRC	PRCD*
	Progressive retinal atrophy	PRA3	FAM161A
	Progressive retinal atrophy	PRA_RCD4	C2ORF71
Toy Poodle	Progressive retinal atrophy	PRA_PRC	PRCD*
Weimaraner	XL Progressive retinal atrophy	XLPR	RPGR
Welsh Corgi (Cardigan)	Progressive retinal atrophy	PRA_RCD3	PDE6A
Welsh Corgi (Pembroke)	Progressive retinal atrophy	PRA_RCD3	PDE6A
Wire-haired Dachshund	Progressive retinal atrophy	PRA_CRD	NPHP4
Yorkshire Terrier	Progressive retinal atrophy	PRA_PRC	PRCD*