

Supporting Table 2: SOD1:c.118 Genotypes and A-allele Frequencies for Individual Breeds

Breed or Variety	Total Tested	Genotype			A-Allele Frequency
		G/G	A/G	A/A	
Airedale Terrier	44	22	11	11	0.38
Affenpinscher	6	6	0	0	0.00
Afghan Hound	7	7	0	0	0.00
Akbash Dog	14	14	0	0	0.00
Akita	58	58	0	0	0.00
Alaskan Husky	3	3	0	0	0.00
Alaskan Klee Kai	10	10	0	0	0.00
Alaskan Malamute	61	60	0	1	0.02
Alaskan Noble Companion Dog	1	1	0	0	0.00
American Bulldog	39	36	2	1	0.05
American Eskimo Dog	40	13	14	13	0.50
American Foxhound	2	1	1	0	0.25
American Hairless (Rat) Terrier	4	3	1	0	0.13
American Staffordshire Terrier	24	15	2	7	0.33
American Water Spaniel	91	22	46	23	0.51
Anatolian Shepherd Dog	30	25	4	1	0.10
Argentine Dogo	3	3	0	0	0.00
Australian Cattle Dog	61	53	5	3	0.09
Australian Kelpie	2	0	1	1	0.75
Australian Shepherd	113	57	20	36	0.41
Australian Terrier	6	3	3	0	0.25
Basenji	59	59	0	0	0.00
Basset Hound	33	33	0	0	0.00
Beagle	57	52	3	2	0.06
Bearded Collie	40	40	0	0	0.00
Beauceron	17	17	0	0	0.00
Bedlington Terrier	30	30	0	0	0.00
Belgian Malinois	101	92	6	3	0.06
Belgian Sheepdog	38	30	4	4	0.16
Belgian Tervuren	47	44	2	1	0.04
Bergamasco	1	1	0	0	0.00
Berger Picard	31	31	0	0	0.00
Bernese Mountain Dog	2413	941	1112	360	0.38
Bichon Frise	24	23	0	1	0.04
Black & Tan Coonhound	28	28	0	0	0.00
Black Russian Terrier	37	37	0	0	0.00
Bloodhound	264	125	117	22	0.30
Blue Heeler	2	2	0	0	0.00
Bluetick Coonhound	4	3	0	1	0.25
Boerboel	2	2	0	0	0.00
Border Collie	80	63	7	10	0.17
Border Terrier	32	31	0	1	0.03

Borzoi	787	548	209	30	0.17
Boston Terrier	14	13	0	1	0.07
Bouvier des Flandres	51	51	0	0	0.00
Boxer	3934	500	1177	2257	0.72
Boykin Spaniel	4	3	1	0	0.13
Briard	19	19	0	0	0.00
Brittany	37	37	0	0	0.00
Brussels Griffon	6	6	0	0	0.00
Bulldog	13	6	7	0	0.27
Bullmastiff	25	23	0	2	0.08
Bull Terrier	6	6	0	0	0.00
Cairn Terrier	21	21	0	0	0.00
Canaan Dog	169	87	67	15	0.29
Cane Corso	1	1	0	0	0.00
Cardigan Welsh Corgi	544	271	194	79	0.32
Catahoula Leopard Dog	2	1	1	0	0.25
Cavalier King Charles Spaniel	73	10	27	36	0.68
Central Asian Sheepdog (Ovcharka)	1	1	0	0	0.00
Chesapeake Bay Retriever	2344	958	1034	352	0.37
Chihuahua	24	24	0	0	0.00
Chinese Crested	53	40	13	0	0.12
Chinese Shar Pei	26	26	0	0	0.00
Chinook	32	32	0	0	0.00
Chow Chow	37	26	10	1	0.16
Clumber Spaniel	34	31	3	0	0.04
Cocker Spaniel (American)	35	34	1	0	0.01
Collie	151	73	39	39	0.39
Coton de Tulear	110	94	16	0	0.07
Curly Coated Retriever	31	31	0	0	0.00
Czechoslovakian Wolfdog	52	24	21	7	0.34
Dachshund	50	50	0	0	0.00
Dalmatian	180	172	4	4	0.03
Dandie Dinmont Terrier	31	31	0	0	0.00
Decker Terrier	8	7	1	0	0.06
Doberman Pinscher	55	54	0	1	0.02
Dogue du Bordeaux	19	19	0	0	0.00
Dutch Shepherd	12	10	2	0	0.08
English Cocker Spaniel	56	56	0	0	0.00
English Coonhound	8	7	1	0	0.06
English Foxhound	1	1	0	0	0.00
English Setter	39	39	0	0	0.00
English Shepherd	29	26	3	0	0.05
English Springer Spaniel	127	97	17	13	0.17
English Toy Spaniel	34	20	13	1	0.22
Field Spaniel	75	75	0	0	0.00
Finnish Lapphund	31	27	4	0	0.06

Finnish Spitz	33	32	1	0	0.02
Flat-Coated Retriever	37	34	2	1	0.05
Fox Terrier - Smooth	30	30	0	0	0.00
Fox Terrier - Wire	79	1	7	71	0.94
French Bulldog	87	64	18	5	0.16
German Pinscher	30	28	2	0	0.03
German Shepherd Dog	6458	3155	1884	1419	0.37
German Shorthaired Pointer	43	39	1	3	0.08
German Wirehaired Pointer	43	39	4	0	0.05
Giant Schnauzer	41	40	0	1	0.02
Glen of Imaal Terrier	4	4	0	0	0.00
Golden Retriever	334	322	2	10	0.03
Gordon Setter	40	39	0	1	0.03
Great Dane	84	84	0	0	0.00
Great Pyrenees	85	68	10	7	0.14
Greater Swiss Mountain Dog	53	53	0	0	0.00
Greyhound	33	32	0	1	0.03
Hanoverian Hound	1	1	0	0	0.00
Harrier	31	25	6	0	0.10
Havana Silk Dog	2	2	0	0	0.00
Havanese	32	32	0	0	0.00
Hovawart	64	31	17	16	0.38
Ibizan Hound	39	39	0	0	0.00
Icelandic Sheepdog	31	31	0	0	0.00
Irish Red & White Setter	16	16	0	0	0.00
Irish Setter	57	42	12	3	0.16
Irish Terrier	31	28	3	0	0.05
Irish Water Spaniel	28	28	0	0	0.00
Irish Wolfhound	43	40	3	0	0.03
Italian Greyhound	31	31	0	0	0.00
Jack Russell Terrier	60	36	10	14	0.32
Japanese Chin	26	26	0	0	0.00
Karelian Bear Dog	1	1	0	0	0.00
Keeshond	48	47	1	0	0.01
Kerry Blue Terrier	558	254	223	81	0.34
King Shepherd	18	10	5	3	0.31
Komondor	55	32	22	1	0.22
Kuvasz	75	46	19	10	0.26
Labrador Retriever	475	433	19	23	0.07
Leonberger	35	35	0	0	0.00
Lhasa Apso	17	17	0	0	0.00
Lowchen	33	33	0	0	0.00
Maltese	4	4	0	0	0.00
Manchester Terrier-Standard	3	3	0	0	0.00
Manchester Terrier-Toy	30	30	0	0	0.00
Maremma	4	2	0	2	0.50

Mastiff (English Mastiff)	114	93	19	2	0.10
Miniature Bull Terrier	34	34	0	0	0.00
Miniature Pinscher	7	7	0	0	0.00
Miniature Schnauzer	27	26	0	1	0.04
Mountain Cur	1	0	0	1	1.00
Mudi	7	7	0	0	0.00
Native Am Indian Dog	2	2	0	0	0.00
Neapolitan Mastiff	22	22	0	0	0.00
Newfoundland	62	61	0	1	0.02
Norwegian Buhund	9	9	0	0	0.00
Norwegian Elkhound	6	6	0	0	0.00
Norwegian Lundehund	6	6	0	0	0.00
Norfolk Terrier	3	0	2	1	0.67
Norwich Terrier	74	60	14	0	0.09
Nova Scotia Duck Tolling Retriever	59	52	6	1	0.07
Olde English Bulldogge	4	2	1	1	0.38
Old English Sheepdog	49	48	1	0	0.01
Otterhound	31	31	0	0	0.00
Papillon	2	2	0	0	0.00
Parson Russell Terrier	4	4	0	0	0.00
Patterdale Terrier	1	0	0	1	1.00
Pembroke Welsh Corgi	3209	220	898	2091	0.79
Perro de Presa Canario	1	1	0	0	0.00
Peruvian Inca Orchid	1	0	0	1	1.00
Petit Basset Griffon Vendeen	32	32	0	0	0.00
Pharaoh Hound	32	31	0	1	0.03
Pit Bull Terrier	53	23	6	24	0.51
Plott	24	23	1	0	0.02
Pointer	38	35	0	3	0.08
Polish Lowland Sheepdog	24	24	0	0	0.00
Pomeranian	33	26	6	1	0.12
Poodle-Miniature	28	26	2	0	0.04
Poodle-Standard	533	468	60	5	0.07
Poodle-Toy	4	3	1	0	0.13
Portuguese Podengo	29	28	1	0	0.02
Portuguese Pointer	2	2	0	0	0.00
Portuguese Water Dog	44	44	0	0	0.00
Pug	382	202	113	67	0.32
Puli	123	87	29	7	0.17
Pumi	32	28	4	0	0.06
Pyrenean Shepherd	29	29	0	0	0.00
Rat Terrier	63	62	1	0	0.01
Redbone Coonhound	8	8	0	0	0.00
Rhodesian Ridgeback	2645	1381	1023	241	0.28
Romanian Mioritic Shepherd	1	1	0	0	0.00
Rottweiler	76	73	2	1	0.03

Russell Terrier	8	6	2	0	0.13
Saint Bernard	78	60	15	3	0.13
Saluki	26	24	1	1	0.06
Samoyed	45	44	1	0	0.01
Sapsaree	48	48	0	0	0.00
Schipperke	29	29	0	0	0.00
Scottish Deerhound	38	38	0	0	0.00
Scottish Terrier	32	32	0	0	0.00
Sealyham Terrier	31	22	9	0	0.15
Shetland Sheepdog	58	41	10	7	0.21
Shiba Inu	11	11	0	0	0.00
Shih Tzu	21	9	6	6	0.43
Shiloh Shepherd	221	161	53	7	0.15
Siberian Husky	97	92	3	2	0.04
Siberian Laika	1	0	1	0	0.50
Silken Windhound	5	5	0	0	0.00
Silky Terrier	31	23	5	3	0.18
Skye Terrier	9	9	0	0	0.00
Small Munsterlander	1	1	0	0	0.00
Soft Coated Wheaten Terrier	88	45	18	25	0.39
Spinone Italiano	31	31	0	0	0.00
Staffordshire Bull Terrier	52	46	1	5	0.11
Standard Schnauzer	34	33	1	0	0.01
Sussex Spaniel	28	28	0	0	0.00
Swedish Valhund	27	27	0	0	0.00
Tamaskan (Aatu Tamaskan)	59	40	17	2	0.18
Tenterfield Terrier	66	59	7	0	0.05
Tibetan Mastiff	23	23	0	0	0.00
Tibetan Spaniel	2	2	0	0	0.00
Tibetan Terrier	69	32	24	13	0.36
Toy Fox Terrier	27	27	0	0	0.00
Treeing Walker Coonhound	22	21	0	1	0.05
Vizsla	32	32	0	0	0.00
Volpino Italiano	21	21	0	0	0.00
Wachtelhund (German Spaniel)	1	0	1	0	0.50
Weimaraner	112	112	0	0	0.00
Welsh Springer Spaniel	35	35	0	0	0.00
Welsh Terrier	72	41	25	6	0.26
West Highland White Terrier	22	22	0	0	0.00
Whippet	40	40	0	0	0.00
Wirehaired Pointing Griffon	39	39	0	0	0.00
Yorkshire Terrier	4	3	1	0	0.13
hybrid/mix-breed	1368	604	224	540	0.48
TOTALS	33746	16550	9112	8084	0.37