

Animal Name: Ice

Owner: MaryAnn Fletcher Membership Number : 9195397734 Member Body/Breed Club: Rocky Creek Labradors

Approved Collection Method: 𝒴Yes



Accredited and Compliant with











Harmoniza Genetic Te t for Dogs





Scan to authenticate this Report online

### **Owner's details**

Name:	MaryAnn Fletcher				
Animal's Details					
Registered Name :	Rockycreek's PBR On The Rocks At Chrismill				
Pet Name :	Ice				
Registration Number :	SS13928702				
Breed :	Labrador Retriever				
Microchip Number :	956000012082520				
Sex:	Female				
Date of Birth :	27th Jul 2019				
Colour :	Black				

### **Sample Collection Details**

Case Number :	22G02967
Collected By:	Kimberly Hom
Approved Collection :	Yes
Sample Type :	SWAB

### **Test Details**

Test Requested :	Labrador Retriever – Full Breed Profile			
Pet Name :	Ice			
Date of Test :	24th Mar 2022			

### **Authorisation**

Sample with Lab ID Number 22G02967 was received at Orivet Genetics, DNA was extracted and analysed with the following result reported:

.....

Orivet Genetic Analyst







Scan to authenticate this Report online

### **Animal's Details**

Registered Name :	Rockycreek's PBR On The Rocks At Chrismill
Pet Name :	lce
Registration Number :	SS13928702
Breed :	Labrador Retriever
Microchip Number :	956000012082520
Sex:	Female
Date of Birth :	27th Jul 2019
Colour :	Black

### **ISAG Profile 1**

Cfam_1:106430955	AA	Cfam_1:119414584	A G	Cfam_1:20842130		Cfam_1:3962719	GG	Cfam_1:70238933	AG	Cfam_1:80971770	
(BICF2S23111132)		(BICF2P157421)				(BICF2G630708384)		(BICF2P554817)			
Cfam_10:10652659	AA	Cfam_10:22409408		Cfam_10:30034450		Čfam_10:66922269	A G		AA	Cfam_11:5318488	AG
(BICF2P237994) Cfam_11:65603333		Cfam_12:35306641		Cfam_12:55201839	GG	(BICF2S23049416) Cfam_12:5579055	ΑΑ	(BICF2P1308802) Cfam_12:68125319	A G	(BICF2S2338108) Cfam_13:59896033	AC
Cfam_13:8704192	A G	Cfam_14:50063321	GG	(BICF2G630122583) Cfam_14:58465266	AG	(BICF2P382742) Cfam_15:19299365	A G	(BICF2P1344095) Cfam_15:22834903	ΑΑ	(BICF2P561057) Cfam_16:29634940	ΑΑ
(BICF2P182473) Cfam_16:46884446	AC	(BICF2P624936) Cfam_16:57958947	ΑΑ	(P24_2) Cfam_17:10649078	ΑΑ	(BICF2P105070) Cfam_17:34462308	GG	(BICF2G630437783) Cfam_17:39124697	ΑΑ	(BICF2G630111735) Cfam_18:54361347	AG
(BICF2P774003) Cfam_18:6745949	GG	(BICF2P635478) Cfam_19:15926130	ΑΑ	(BICF2G630220326) Cfam_19:27288167	ΑΑ	(BICF2G630209373) Cfam_19:47470564	ΑΑ	(BICF2P998036) Cfam_19:841347	ΑΑ	(B1CF2G630689403) Cfam_2:2610859	GG
(BICF2S23535154) Cfam_2:38293797	A G	(P13_3) Cfam_2:77806065	GG	(BICF2P251850) Cfam_20:13740894	ΑΑ	(BICF2S23214514) Cfam_20:49900586	ΑΑ	(BICF2S23737033) Cfam_20:57167714	ΑΑ	(P32_3) Cfam_21:15558670	AG
(BICF2P1159837) Cfam_21:25537675	ΑΑ	(BICF2P878175) Cfam_21:35719434	AG	(BICF2S23246455) Cfam_22:26694580	GG	(BICF2P347679) Cfam_22:55308193	ΑΑ	(P26_1) Cfam_22:641125		(BICF2G630653298) Cfam_23:42886681	сс
(BICF2S23018785) Cfam_23:50772488	ΑΑ	(BICF2S23326150) Cfam_24:23393510		(BICF2G630326688) Cfam_24:29909901	GG	(BICF2S23329382) Cfam_24:47381908	A G	Cfam_25:2073511	сс	(P34_1) Cfam_25:33986348	GG
(BICF2P277987) Cfam_25:47708600	GG	Cfam_26:20004896	ΑΑ	(TIGRP2P316532_rs8597522) Cfam_26:35071515	ΑΑ	(BICF2P990814) Cfam_27:22599860	GG	(P15_3) Cfam_27:2619058	ΑΑ	(BICF2G630102146) Cfam_27:41049333	сс
(BICF2G630159183) Cfam_28:18509221	A G	(BICF2G630798972) Cfam_28:38885325	ΑΑ	(BICF2P1192522) Cfam_28:9877730	ΑΑ	(BICF2G630149030) Cfam_29:17561258	GG	(BICF2S236196) Cfam_29:251970		(TI GRP2P356245_rs8830240) Cfam_29:36319325	сс
(BICF2G630271966) Cfam_29:9625359	GG	(TI GR P 2 P 362535_rs9130694) Cf am_3:1252765	ΑΑ	(BICF2G630276039) Cfam_3:24757939		(BICF2S23713161) Cfam_3:73570828		Cfam_30:15542105	A G	(B1CF2G630634836) Cfam_30:32852404	GG
(P17_3) Cfam_30:3896482	ΑΑ	(P27_2) Cfam_31:21068798	A G	Cfam_31:39391935	ΑΑ	Cfam_32:17792284	GG	(BICF2G630409193) Cfam_32:32382778	ΑΑ	(TI GRP2P372104_rs9153277) Cfam_32:679380	A G
(BICF2S23124313) Cfam_33:15018500	A G	(BICF2P1454500) Cfam_33:23742061		(BICF2G630200354) Cfam_34:195313	AC	(BICF2G630594648) Cfam_34:24396298		(BICF2P885380) Cfam_35:15345329	AC	(G1425f16S28) Cfam_36:12714421	ΑΑ
(BICF2P516667) Cfam_36:23459390	ΑΑ	Cfam_36:3565500	ΑΑ	(P2_3) Cfam_37:15436615	AG	Cfam_37:27667297	ΑΑ	(TI GR P2P 407751_rs8803124) Cf am_37:9398945		(BICF2P1226745) Cfam_38:17657161	
(BICF2P935470) Cfam_38:20441216	ΑΑ	(BICF2P728698) Cfam_38:9224942	AC	(P21_3) Cfam_4:31301072	AG	(BICF2G630133028) Cfam_4:64121754		Cfam_4:75910211	A G	Cfam_4:86049027	AG
(BICF2P600196) Cfam_5:26320165		(BICF2P615597) Cfam_5:5410890	GG	(BICF2P805553) Cfam_5:85451804	AG	Cfam_6:11553458	AG	(BICF2P1357746) Cfam_6:33976751		(BICF2S23126079) Cfam_6:64006720	
Cfam_7:15011628	ΑΑ	(BICF2S23648905) Cfam_7:36555518	GG	(BICF2P1346673) Cfam_7:76294		(P8_1) Cfam_8:18121580	GG	Cfam_8:45852939		Cfam_8:5291824	ΑΑ
(BICF2G630552597)		(BICF2G630558437)				(BICF2P65087)				(P23_3)	
		Cfam_9:22610227	A G	Cfam_9:40096141		Cfam_9:52710991	A G	Cfam_9:60437147	A G		
(BICF2S23449478)		(BICF2P1010945)		(BICF2P1216677)		(P24_1)		(BICF2S22943825)			

**Owner's Name :** MaryAnn Fletcher

Pet Name: Ice

Registered Name :	Rockycreek's PBR On The Rocks At Chrismill	
Pet Name :	Ice	
Registration Number :	SS13928702	
Breed :	Labrador Retriever	
Microchip Number :	956000012082520	
Sex:	Female	
Date of Birth :	27th Jul 2019	
Colour :	Black	

### **Animal's Details**

### **ISAG Profile 2**

Cfam_1:119306331	GG	Cfam_1:72613047	AA	Cfam_1:74450772		Cfam_10:14685262	A G	Cfam_10:39548483	A G	Cfam_10:47923623	
(BICF2P635172) Cfam_10:57954366	A A	(P1_2) Cfam_10:8085469		Cfam_11:1161870		(BICF2G630666362) Cfam_11:62157625	ΑΑ	(BICF2G630488267) Cfam_11:70698603	ΑΑ	Cfam_12:23059939	AG
(BICF2P963969) Cfam_12:40681020	A G	Cfam_12:6337286	A G	Cfam_12:70657733	A G	(BICF2G630306265) Cfam_12:8532712	A G	(BICF2G630307199) Cfam_13:40616856	GG	(BICF2P465276) Cfam_14:55735620	A G
(TI GR P 2P 164720_rs8839809) Cf am_16:29675662	сс	(BICF2P1193353) Cfam_16:58093031	ΑΑ	(BICF2P1183665) Cfam_17:12787849		(BICF2P496466) Cfam_17:57371669	GG	(BICF2P651575) Cfam_17:9407683	GG	(BICF2P1369088) Cfam_18:10189759	AG
(BICF2S23250041) Cfam_18:16385020	A G	(P24_3) Cfam_18:16388978	AC	Cfam_18:31579269	GG	(BICF2S2351979) Cfam_18:47325586	ΑΑ	(BICF2G630221287) Cfam_19:30246414	GG	(BICF2P46604) Cfam_19:40189405	ΑΑ
(BICF2S23529290) Cfam_19:42756283	ΑΑ	(BICF2P250787) Cfam_20:45777531	A G	(BICF2P184963) Cfam_20:48602465	GG	(TI GR P 2P 255960_rs9030578) Cf am_20:6046176	ΑΑ	(P25_2) Cfam_21:22581321		(BICF2P1310805) Cfam_21:29796784	ΑΑ
(BICF2P401677) Cfam_21:31751817	ΑΑ	(BICF2P345488) Cfam_22:20498421		(BICF2P840653) Cfam_22:33934047	ΑΑ	(BICF2S22910736) Cfam_22:37522364	GG	Cfam_22:39647748	AG	(TI GRP2P283310_rs8881748) Cfam_22:61153661	AG
(BICF2P42825) Cfam_23:44497217		Cfam_23:48055836	AC	(BICF2G630328323) Cfam_24:18599997	A G	(BICF2P345056) Cfam_24:27925354		(BICF2S23519644) Cfam_24:30954773	GG	(P26_3) Cfam_24:43589304	GG
Cfam_24:45191477	A G	(BICF2G630365778) Cfam_25:4614777	ΑΑ	(BICF2G630504410) Cfam_27:20948372	ΑΑ	Cfam_27:34444177	A G	(BICF2G630499189) Cfam_27:42526114	GG	(BICF2S23138418) Cfam_28:12804225	ΑΑ
(P15_2) Cfam_28:34478533	ΑΑ	(BICF2P1362405) Cfam_28:35104850	A G	(BICF2S2359809) Cfam_28:9703418	ΑΑ	(TI GR P 2P 354499_rs9162547) Cf am_29:19681270		(BICF2S22913753) Cfam_29:22992304	GG	(BICF2G630274628) Cfam_29:4020192	ΑΑ
(BICF2G630264994) Cfam_29:4022252	GG	(BICF2P1226838) Cfam_3:10255068	GG	(BICF2G630276136) Cfam_3:37849557	AG	Cfam_3:43055696	ΑΑ	(BICF2P950116) Cfam_3:43063677	AG	(BICF2P464536) Cfam_3:64084413	ΑΑ
(BICF2S22912385) Cfam_3:90291255	AG	(BICF2S2399705) Cfam_3:91626907		(BICF2P643134) Cfam_30:10012939		(BICF2G630340940) Cfam_30:11735245	ΑΑ	(BICF2G630340944) Cfam_30:27619023	ΑΑ	(P4_3) Cfam_31:20912553	
(BICF2P285489) Cfam_32:13183511	GG	Cfam_33:15233992	ΑΑ	Cfam_33:22070526	AG	(BICF2P103615) Cfam_33:22472901	сс	(BICF2S22926284) Cfam_33:22648231	AG	Cfam_34:24351570	AG
(BICF2P1019402) Cfam_34:34993916		(BICF2S23356653) Cfam_34:37323213	AG	(BICF2G63078341) Cfam 34:41703614		(BICF2P378969) Cfam_35:15283717	AG	(TI GR P2P 389035_rs9038546) Cfam 36:10084888	AG	(BICF2S23649947) Cfam_36:12723744	ΑΑ
Cfam_36:18627936		(BICF2P590440) Cfam_36:288045	GG	Cfam_36:9241262		(BICF2S23429022) Cfam_37:18338930		(BICF2P129670) Cfam_37:26611359	AG	(BICF2P70891) Cfam_37:28611801	AG
Cfam 37:30110473		(P6_2) Cfam_37:30902202		Cfam 38:13098194		Cfam 38:15271384	AG	(BICF2P129347) Cfam 38:19172567	сс	(BICF2G630133994) Cfam 38:20930997	ΑΑ
Cfam 4:42104780	AG	 Cfam_4:67040898		Cfam_4:70217695		(BICF2S22928800) Cfam_5:13080303		(BICF2S23031254) Cfam_5:36642434		(BICF2S23614068) Cfam 5:44650576	GG
(BICF2P1286728)		Cfam_5:64611038	AG	Cfam_7:15017979	ΔΔ	Cfam 7:3318809	GG			(BICF2G630187658) Cfam_7:76487265	GG
(BICF2P496837)		(BICF2P414351) Cfgm 8:24614720		(BICF2G630552598) Cfam_8:52381322		(BICF2P1173491) Cfam_8:6188937		Cfam 8:67183794	GG	(BICF2P798404) Cfam_9:20867959	
(BICF2P1391407) Cfam_9:32506288	00	(BICF2P1141966) Cfam_9:50114927	70	Cfam_9:56021221 (B1CF2G630474528)	GG	(TI GR P 2P 116826_rs8741680)		(BICF2P789367)		Gran_7.20007707	

**Owner's Name :** MaryAnn Fletcher

Pet Name: Ice

Approved Collection Method :  ${rak{O}}$  Yes

Registered Name :	Rockycreek's PBR On The Rocks At Chrismill	
Pet Name :	lce	
Registration Number :	SS13928702	
Breed :	Labrador Retriever	
Microchip Number :	956000012082520	
Sex :	Female	
Date of Birth :	27th Jul 2019	
Colour :	Black	

### **Animal's Details**

### **DNA Profile**

BICF2G630102146	G G BI CF2G630149581	A A BICF2G630159183	G G BI CF2G630170631	C C BI CF2G630187649	A A BICF2G630187658	GG
(BICF2G630102146) BICF2G630204463	(BICF2G630149581) A A BICF2G630209373	(BICF2G630159183) G G BICF2G630209508	(BICF2G630170631) A G BICF2G630255439	(BICF2G630187649) G G BICF2G630271966	(BICF2G630187658) A G BICF2G630274628	AA
(BICF2G630204463) BICF2G630307199	(BICF2G630209373) A A BICF2G630340940	(BICF2G630209508) A A BICF2G630340944	(BICF2G630255439) A G BICF2G630365778	(BICF2G630271966) A C BICF2G630382763	(BICF2G630274628) G G BICF2G630437783	AA
(BICF2G630307199) BICF2G630449851	(BICF2G630340940) A A BICF2G630467607	(BICF2G630340944) C C BICF2G630488267	(BICF2G630365778) A G BICF2G630504410	(BICF2G630382763) A G BICF2G630552598	(BICF2G630437783) A A BICF2G630558437	GG
(BICF2G630449851) BICF2G630594648	(BICF2G630467607) G G BICF2G630634836	(BICF2G630488267) C C BICF2G630641678	(BICF2G630504410) G G BICF2G630689403	(BICF2G630552598) A G BICF2G630798972	(BICF2G630558437) A A BICF2G630814422	сс
(BICF2G630594648) BICF2G63090019	(BICF2G630634836) A T BICF2P1019402	(BICF2G630641678) G G BICF2P103615	(BICF2G630689403) A A BICF2P1060087	(BICF2G630798972) G G BICF2P1104630	(BICF2G630814422) A G BICF2P1141966	AG
(BICF2G63090019) BICF2P1173491	(BICF2P1019402) G G BICF2P1183665	(BICF2P103615) A G BICF2P1193353	(BICF2P1060087) A G BICF2P1216677	(BICF2P1104630) A A BICF2P1226838	(BICF2P1141966) A G BICF2P1232055	AA
(BICF2P1173491) BICF2P1271174	(BICF2P1183665) A A BICF2P129347	(BICF2P1193353) A G BICF2P129670	(BICF2P1216677) A G BICF2P1308802	(BICF2P1226838) A A BICF2P1310805	(BICF2P1232055) A A BICF2P1344095	A G
(BICF2P1271174) BICF2P1346673	(BICF2P129347) A G BICF2P1357746	(BICF2P129670) A G BICF2P1454500	(BICF2P1308802) A G BICF2P155421	(BICF2P1310805) A A BICF2P157421	(BICF2P1344095) A G BICF2P182473	AG
(BICF2P1346673) BICF2P224656	(BICF2P1357746) A A BICF2P237994	(BICF2P1454500) A A BICF2P246592	(BICF2P155421) C C BICF2P250787	(BICF2P157421) A C BICF2P25730	(BICF2P182473) A T BICF2P283440	GG
(BICF2P224656) BICF2P285489	(BICF2P237994) A G BICF2P345056	(BICF2P246592) G G BICF2P347679	(BICF2P250787) A A BICF2P378969	(BICF2P25730) C C BICF2P382742	(BICF2P283440) A A BICF2P415783	GG
(BICF2P285489) BICF2P422152	(BICF2P345056) A G BICF2P508740	(BICF2P347679) C G BICF2P516667	(BICF2P378969) A G BICF2P553317	(BICF2P382742) G G BICF2P554817	(BICF2P415783) A G BICF2P561057	AC
(BICF2P422152) BICF2P585943	(BICF2P508740) A G BICF2P624936	(BICF2P516667) G G BICF2P635172	(BICF2P553317) G G BICF2P643134	(BICF2P554817) A G BICF2P65087	(BICF2P561057) G G BICF2P651576	AA
(BICF2P585943) BICF2P717226	(BICF2P624936) A C BICF2P751654	(BICF2P635172) A A BICF2P774003	(BICF2P643134) A C BICF2P798404	(BICF2P65087) G G BICF2P842510	(BICF2P651576) A G BICF2P856893	GG
(BICF2P717226) BICF2P878175	(BICF2P751654) G G BICF2P935470	(BICF2P774003) A A BICF2P990814	(BICF2P798404) A G BICF2S22910736	(BICF2P842510) A A BICF2S22913753	(BICF2P856893) G G BICF2S22928800	A G
(BICF2P878175) BICF2S22943825	(BICF2P935470) A G BICF2S23028732	(BICF2P990814) TT BICF2S23031254	(BICF2S22910736) C C BICF2S23049416	(BICF2S22913753) A G BICF2S23057560	(BICF2S22928800) A G BICF2S23124313	AA
(BICF2S22943825) BICF2S23126079	(B1CF2S23028732) A G B1CF2S23246455	(BICF2S23031254) A A BICF2S23250041	(BICF2S23049416) C C BICF2S23333411	(BICF2S23057560) G G BICF2S23356653	(BICF2S23124313) A A BICF2S23429022	A G
(BICF2S23126079) BICF2S23449478	(BICF2S23246455) A A BICF2S23519644	(BICF2S23250041) A G BICF2S2351979	(BICF2S23333411) G G BICF2S2359809	(BICF2S23356653) A A BICF2S236196	(BICF2S23429022) A A BICF2S23626625	сс
(BICF2S23449478) BICF2S23648905	(BICF2S23519644) G G BICF2S23649947	(BICF2S2351979) A G BICF2S23713161	(BICF2S2359809) G G BICF2S23737033	(BICF2S236196) A A BICF2S24511913	(BICF2S23626625) A G TIGRP2P106843_rs8858816	ა <mark>GG</mark>
(BICF2S23648905) TIGRP2P116826_rs8741680	(BICF2S23649947) A A TIGRP2P164720_rs8839809	(BICF2S23713161) A G TIGRP2P177606_rs8886563	(BICF2S23737033) G G TIGRP2P215708_rs8686029	(BICF2S24511913) A T TIGRP2P316532_rs8597522	(TI GRP 2P 106843_rs8858816 G G TI GR P 2P 372104_rs9153277	
(TI GR P 2P 116826_rs8741680 TI GR P 2P 402042_rs9121006		) (TI GRP 2P 177606_rs8886563) G G TI GRP 2P 407751_rs8803124		) (TI GR P 2 P 316532_rs8597522 A A	) (TI GR P 2 P 3 7 2 1 0 4 _ rs 9 1 5 3 2 7 3	7)
(TI GR P 2 P 402042_rs9121006	<ul> <li>(TI GR P 2P 406551_rs9235397</li> </ul>	) (TI GR P 2 P 407751 _ rs8803124	) (BICF2G630646431)			

**Owner's Name :** MaryAnn Fletcher

Pet Name: Ice

Microchip Number 956000012082520

Approved Collection Method :  ${rak{O}}$  Yes





Scan to authenticate this Report online

Sample with Lab ID Number 22G02967 was received at Orivet Genetics, DNA was extracted and analysed with the following result reported

**Test Reported** : ACHROMATOPSIA (LABRADOR TYPE)

#### **Result : NEGATIVE / CLEAR [NO VARIANT DETECTED]**<sup>1</sup>

Gene : CNGA3 Variant Detected : a missense mutation in exon 7 (c.C1270T/p.R424W)

We have scanned the DNA and the genotype of this animal is NORMAL - no presence of the disease associated variant (mutation) has been detected. This result may also be referred to as NORMAL, "-/-" or "wild type (WT)" or "homozygous negative". The animal is clear of the disease and will not pass on the disease-causing variant.

### Test Reported : CENTRONUCLEAR MYOPATHY (LABRADOR RETRIEVER TYPE)

#### **Result : NEGATIVE / CLEAR [NO VARIANT DETECTED]<sup>1</sup>**

**Gene** : 3-hydroxyacyl-CoA dehydratase 1 (HACD1) also known as PTPLA on chromosome 2 **Variant Detected** : 236 bp SINE repeat insertion in exon 2 of HACD1

We have scanned the DNA and the genotype of this animal is NORMAL – no presence of the disease associated variant (mutation) has been detected. This result may also be referred to as NORMAL, "-/-" or "wild type (WT)" or "homozygous negative". The animal is clear of the disease and will not pass on the disease-causing variant.

**Test Reported** : CONGENITAL MACROTHROMBOCYTOPENIA **Result** : **NEGATIVE / CLEAR [NO VARIANT DETECTED]**<sup>1</sup> **Gene** : Tubulin beta 1 class VI (TUBB1) on Chromosome 24

Variant Detected : Base Substitutionc.745G>Ap.Asp249Asn

We have scanned the DNA and the genotype of this animal is NORMAL - no presence of the disease associated variant (mutation) has been detected. This result may also be referred to as NORMAL, "-/-" or "wild type (WT)" or "homozygous negative". The animal is clear of the disease and will not pass on the disease-causing variant.

Owner's Name : MaryAnn Fletcher

Pet Name: Ice

Microchip Number 956000012082520





Scan to authenticate this Report online

Sample with Lab ID Number 22G02967 was received at Orivet Genetics, DNA was extracted and analysed with the following result reported

Test Reported : CONGENITAL MYASTHENIC SYNDROME (LABRADOR RETRIEVER TYPE) Result : NEGATIVE / CLEAR [NO VARIANT DETECTED]<sup>1</sup>

**Gene** : 2-hydroxyacyl-CoA lyase 1 (COLQ) on chromosome 23 **Variant Detected** : Base Substitutionc.1010T>Cp.lle337Thr

We have scanned the DNA and the genotype of this animal is NORMAL - no presence of the disease associated variant (mutation) has been detected. This result may also be referred to as NORMAL, "-/-" or "wild type (WT)" or "homozygous negative". The animal is clear of the disease and will not pass on the disease-causing variant.

Test Reported : CYSTINURIA (SLC3A1) LABRADOR RETRIEVER TYPE

**Result : NEGATIVE / CLEAR [NO VARIANT DETECTED]<sup>1</sup>** 

Gene : Solute carrier family 3 member 1 (SLC3A1) on chromosome 10

Variant Detected : Nucleotide Deletionc.350delGp.Gly117Alafs\*41

We have scanned the DNA and the genotype of this animal is NORMAL - no presence of the disease associated variant (mutation) has been detected. This result may also be referred to as NORMAL, "-/-" or "wild type (WT)" or "homozygous negative". The animal is clear of the disease and will not pass on the disease-causing variant.

**Test Reported** : DEGENERATIVE MYELOPATHY **Result** : **NEGATIVE / CLEAR [NO VARIANT DETECTED]**<sup>1</sup> **Gene** : Superoxide dismutase 1 (SOD1) on chromosome 31

Variant Detected : Base Substitutionc.118G>Ap.Glu40Lys

We have scanned the DNA and the genotype of this animal is NORMAL - no presence of the disease associated variant (mutation) has been detected. This result may also be referred to as NORMAL, "-/-" or "wild type (WT)" or "homozygous negative". The animal is clear of the disease and will not pass on the disease-causing variant.

Owner's Name : MaryAnn Fletcher

Pet Name: Ice

Microchip Number 956000012082520





Scan to authenticate this Report online

Sample with Lab ID Number 22G02967 was received at Orivet Genetics, DNA was extracted and analysed with the following result reported

Test Reported : EHLERS-DANLOS SYNDROME (LABRADOR TYPE) Result : NEGATIVE / CLEAR [NO VARIANT DETECTED]<sup>1</sup> Gene : COL5A1, chr9 Variant Detected : c.3038delGp.Gly1013ValfsTer260

We have scanned the DNA and the genotype of this animal is NORMAL - no presence of the disease associated variant (mutation) has been detected. This result may also be referred to as NORMAL, "-/-" or "wild type (WT)" or "homozygous negative". The animal is clear of the disease and will not pass on the disease-causing variant.

Test Reported : ELLIPTOCYTOSIS B-SPECTRIN (LABRADOR RETRIEVER/POODLE TYPE)

**Result : NEGATIVE / CLEAR [NO VARIANT DETECTED]**<sup>1</sup>

**Gene** : Spectrin beta erythrocytic (SPTB) Chromosome 8 **Variant Detected** : Base Substitutionc.6384C>TThr2110Met

We have scanned the DNA and the genotype of this animal is NORMAL – no presence of the disease associated variant (mutation) has been detected. This result may also be referred to as NORMAL, "-/-" or "wild type (WT)" or "homozygous negative". The animal is clear of the disease and will not pass on the disease-causing variant.

Test Reported : EXERCISE INDUCED COLLAPSE (RETRIEVER TYPE) Result : NEGATIVE / CLEAR [NO VARIANT DETECTED]<sup>1</sup> Gene : DNM1 Variant Detected : Base Substitution c.767 G>T

We have scanned the DNA and the genotype of this animal is NORMAL - no presence of the disease associated variant (mutation) has been detected. This result may also be referred to as NORMAL, "-/-" or "wild type (WT)" or "homozygous negative". The animal is clear of the disease and will not pass on the disease-causing variant.

Owner's Name : MaryAnn Fletcher

Pet Name: Ice





Scan to authenticate this Report online

Sample with Lab ID Number 22G02967 was received at Orivet Genetics, DNA was extracted and analysed with the following result reported

**Test Reported**: HEREDITARY NASAL PARAKERATOSIS/DRY NOSE (LABRADOR RETRIEVER TYPE) **Result**: NEGATIVE / CLEAR [NO VARIANT DETECTED]<sup>1</sup>

**Gene** : Suppressor of variegation 3-9 homolog 2 (SUV39H2) on chromosome 2 **Variant Detected** : Base Substitutionc.972T>Gp.Asn324Lys

We have scanned the DNA and the genotype of this animal is NORMAL - no presence of the disease associated variant (mutation) has been detected. This result may also be referred to as NORMAL, "-/-" or "wild type (WT)" or "homozygous negative". The animal is clear of the disease and will not pass on the disease-causing variant.

Test Reported : HYPERURICOSURIA

**Result : NEGATIVE / CLEAR [NO VARIANT DETECTED]**<sup>1</sup>

Gene : Solute carrier family 2 member 9 (SLC2A9) on chromosome 3

Variant Detected : Base Substitutionc.563G>Tp.Cys188Phe

We have scanned the DNA and the genotype of this animal is NORMAL - no presence of the disease associated variant (mutation) has been detected. This result may also be referred to as NORMAL, "-/-" or "wild type (WT)" or "homozygous negative". The animal is clear of the disease and will not pass on the disease-causing variant.

Test Reported : MACULAR CORNEAL DYSTROPHY (LABRADOR TYPE) Result : NEGATIVE / CLEAR [NO VARIANT DETECTED]<sup>1</sup> Gene : LOC4 Variant Detected : c.814C>A

We have scanned the DNA and the genotype of this animal is NORMAL - no presence of the disease associated variant (mutation) has been detected. This result may also be referred to as NORMAL, "-/-" or "wild type (WT)" or "homozygous negative". The animal is clear of the disease and will not pass on the disease-causing variant.

Owner's Name : MaryAnn Fletcher

Pet Name: Ice

Microchip Number 956000012082520





Scan to authenticate this Report online

Sample with Lab ID Number 22G02967 was received at Orivet Genetics, DNA was extracted and analysed with the following result reported

Test Reported : MALIGNANT HYPERTHERMIA

### **Result : NEGATIVE / CLEAR [NO VARIANT DETECTED]**<sup>1</sup>

**Gene** : Ryanodine receptor 1 (RYR1) on Chromosome 1 **Variant Detected** : Base Substitutionc.1640T>Cp.Val547Ala

We have scanned the DNA and the genotype of this animal is NORMAL - no presence of the disease associated variant (mutation) has been detected. This result may also be referred to as NORMAL, "-/-" or "wild type (WT)" or "homozygous negative". The animal is clear of the disease and will not pass on the disease-causing variant.

Test Reported : MYOTUBULAR MYOPATHY X-LINKED (LABRADOR RETRIEVER TYPE)

### **Result : NEGATIVE / CLEAR [NO VARIANT DETECTED]**<sup>1</sup>

Gene : Myotubularin 1 (MTM1) on Chromosome X

Variant Detected : Base Substitutionc.465C>Ap.Asn155Lys

We have scanned the DNA and the genotype of this animal is NORMAL - no presence of the disease associated variant (mutation) has been detected. This result may also be referred to as NORMAL, "-/-" or "wild type (WT)" or "homozygous negative". The animal is clear of the disease and will not pass on the disease-causing variant.

Test Reported : NARCOLEPSY (LABRADOR)

#### Result : NEGATIVE / CLEAR [NO VARIANT DETECTED]<sup>1</sup>

**Gene**: Hypocretin receptor 2 (HCRTR2) on Chromosome 12 **Variant Detected**: Base Substitutionc.1105+5G>Asplice site mutation

We have scanned the DNA and the genotype of this animal is NORMAL - no presence of the disease associated variant (mutation) has been detected. This result may also be referred to as NORMAL, "-/-" or "wild type (WT)" or "homozygous negative". The animal is clear of the disease and will not pass on the disease-causing variant.

Owner's Name : MaryAnn Fletcher

Pet Name : Ice

Microchip Number 956000012082520





Scan to authenticate this Report online

Sample with Lab ID Number 22G02967 was received at Orivet Genetics, DNA was extracted and analysed with the following result reported

**Test Reported** : PROGRESSIVE ROD CONE DEGENERATION (PRCD) - PRA

### **Result : NEGATIVE / CLEAR [NO VARIANT DETECTED]<sup>1</sup>**

**Gene**: Photoreceptor disc component (PRCD) on Chromosome 9 **Variant Detected**: Base Substitutionc.5 G>Ap.Cys2Tyr

We have scanned the DNA and the genotype of this animal is NORMAL - no presence of the disease associated variant (mutation) has been detected. This result may also be referred to as NORMAL, "-/-" or "wild type (WT)" or "homozygous negative". The animal is clear of the disease and will not pass on the disease-causing variant.

Test Reported : PYRUVATE KINASE DEFICIENCY (LABRADOR TYPE) Result : NEGATIVE / CLEAR [NO VARIANT DETECTED]<sup>1</sup> Gene : PKLR Variant Detected : c.799C>T

We have scanned the DNA and the genotype of this animal is NORMAL - no presence of the disease associated variant (mutation) has been detected. This result may also be referred to as NORMAL, "-/-" or "wild type (WT)" or "homozygous negative". The animal is clear of the disease and will not pass on the disease-causing variant.

**Test Reported**: SKELETAL DYSPLASIA 2 (MILD DISPROPORTIONATE DWARFISM) **Result: NEGATIVE / CLEAR [NO VARIANT DETECTED]**<sup>1</sup>

**Gene** : Collagen alpha-2(XI) chain gene (COL11A2) on chromosome 12 **Variant Detected** : Base Substitutionc.143G>Cp.Arg48Pro

We have scanned the DNA and the genotype of this animal is NORMAL - no presence of the disease associated variant (mutation) has been detected. This result may also be referred to as NORMAL, "-/-" or "wild type (WT)" or "homozygous negative". The animal is clear of the disease and will not pass on the disease-causing variant.

Owner's Name : MaryAnn Fletcher

Pet Name: Ice

Microchip Number 956000012082520





Scan to authenticate this Report online

Sample with Lab ID Number 22G02967 was received at Orivet Genetics, DNA was extracted and analysed with the following result reported

Test Reported : STARGARDT DISEASE (RETINAL DEGENERATION) Result : NEGATIVE / CLEAR [NO VARIANT DETECTED]<sup>1</sup> Gene : ABCA4 Variant Detected : c.4176insC

We have scanned the DNA and the genotype of this animal is NORMAL - no presence of the disease associated variant (mutation) has been detected. This result may also be referred to as NORMAL, "-/-" or "wild type (WT)" or "homozygous negative". The animal is clear of the disease and will not pass on the disease-causing variant.

Test Reported : E LOCUS - (CREAM/RED/YELLOW)

Result : E/e - BLACK CARRIES EXTENSION [YELLOW/WHITE/APRICOT/RUBY/RED]<sup>1</sup> Gene : MC1R Variant Detected : Em (point mutation) > E (wild type) > e (point mutation) chr5:63694334-63694334: C>T

One copy of black (E) and one copy of red/yellow/cream/apricot/white. These "e" colours are dependent on breed. The "e" allele is non-functional. May produce yellow/white/apricot/ruby or red offspring if mated to another carrier of "e".

Test Reported : I PHEOMELANIN LOCUS COLOUR INTENSITY

**Result :** I/i- ONE COPY OF THE MFSD12 INTENSITY/CREAM ALLELE (NOT LIKELY TO SHOW EXTREME DILUTION) 1

Gene: MFSD12 Variant Detected: c.151C>T (p.Arq51Cys)

This variant is associated with the dilution of phaeomelanin which is involved in the cream/white/apricot color in dogs. Degree of intensity (dilution) will vary within and between breeds.

**Owner's Name :** MaryAnn Fletcher

Pet Name: Ice

Microchip Number 956000012082520





Scan to authenticate this Report online

Sample with Lab ID Number 22G02967 was received at Orivet Genetics, DNA was extracted and analysed with the following result reported

Test Reported : BROWN DELETION = BD Result : B<sup>d</sup>/B<sup>d</sup> - DOES NOT CARRY BROWN/RED/LIVER or CHOCOLATE [DELETION]<sup>1</sup> Gene : TYRP1 Variant Detected : Base Substitution (Point Mutation)

Does not carry the brown deletion codon. Please refer to the other brown variants to clarify potential colour for offspring.

Test Reported : BROWN STOP CODON = BS

Result : B<sup>s</sup>/B<sup>s</sup> - DOES NOT CARRY BROWN/RED/LIVER or CHOCOLATE [STOP CODON]<sup>1</sup> Gene : TYRP1 Variant Detected : Point Mutation

Variant Detected : Point Mutation

Does not carry the brown stop codon. Please refer to the other brown variants to clarify potential colour for offspring.

Test Reported : BROWN INSERTION = BC

Result : B<sup>c</sup>/B<sup>c</sup> - DOES NOT CARRY BROWN/RED/LIVER or CHOCOLATE [INSERTION]<sup>1</sup>

Gene : TYRP1

Variant Detected : Base Substitution (Point Mutation)

Does not carry the brown insertion codon. Please refer to the other brown variants to clarify potential colour for offspring.

Owner's Name : MaryAnn Fletcher

Pet Name: Ice

Microchip Number 956000012082520





Scan to authenticate this Report online

Sample with Lab ID Number 22G02967 was received at Orivet Genetics, DNA was extracted and analysed with the following result reported

Test Reported : BROWN TYRP1 [LANCASHIRE HEELER TYPE] = BL Result : B<sup>L</sup>/B<sup>L</sup> - DOES NOT CARRY BROWN/LIVER [TYRP1]<sup>1</sup> Gene : Variant Detected :

Test Reported : D (DILUTE) LOCUS Result : D/D - NO COPY OF MLPH-D ALLELE (DILUTE) - PIGMENT IS NORMAL<sup>1</sup> Gene : MLPH Variant Detected : Base Substitution

Full colour, no dilute gene present. The D allele modifies the Melanophillin (MLPH) gene. This animal cannot produce "dilute" offspring. Please Note: There are other dilute variants d2 (Sloughi, Chow Chow & Thai Ridgeback) and rare d3 (Italian Greyhound & Chihuahua) so this test/result may not identify dilute in these breeds.

Test Reported : DILUTE D2 VARIANT (CHOW CHOW TYPE) Result : D<sup>2</sup>/D<sup>2</sup> - NO COPY OF d2 ALLELE (DILUTE) - PIGMENT IS NORMAL<sup>1</sup> Gene : MLPH Variant Detected : c.705G>C

This d2 variant has been shown to be associated with the blue/dilute seen in the Chow Chow, Sloughi, Thai Ridgeback and any mixes of these breeds.

Owner's Name : MaryAnn Fletcher

Pet Name: Ice

Microchip Number 956000012082520





Scan to authenticate this Report online

Sample with Lab ID Number 22G02967 was received at Orivet Genetics, DNA was extracted and analysed with the following result reported

Test Reported : K LOCUS (DOMINANT BLACK)

**Result** : K/K - DOMINANT BLACK - SOLID [WILL NOT BE BRINDLED or EXPRESS AGOUTI]<sup>1</sup> **Gene** : CBD103 **Variant Detected** : Deletion of GGG

Two copies of dominant black (K) are present. No brindle/red or fawn offspring will be produced. Will not express Agouti phenotype. This can also referred to as KB. In some breeds the K locus is fixed so all dogs will be KK. This (the K Locus) can be modified by other genes eg.liver, dilute, greying or merle. Red can only be added through the e locus.

Test Reported : A LOCUS (FAWN/SABLE;TRI/TAN POINTS)

**Result** :  $a^t/a^t$  - TAN POINTS/BLACK & TAN or TRICOLOUR MAY BE BRINDLED [SEE K LOCUS]<sup>1</sup> **Gene** : ASIP

Variant Detected : Base Substitution 246 G>T(A82S); G>A (R83H): C>T (p.R96C)

Homozygous for black and tan/tricolour (no hidden colours) allele. Tri factored/white factored in dogs that have white points. No Bi Factoring (Black White & Tan). Animals are primarily black and have areas of pheomelanin (tan) which tends to be seen on the leg and stomach areas, the side of he head and spots above the eyes. Please note the colour and distribution of pheomelanin "tan" will be dependent on the breed and other colour genes. Please note that any genes on the "A" series will only be expressed if the K locus is kk, kkbr or kbrkbr.

Test Reported : LONG HAIR GENE (CANINE C95F) Result : NEGATIVE - NOT SHOWING THE PHENOTYPE<sup>1</sup> Gene : FGF5 Variant Detected : p.Cys95Phe c284G>T (Point Mutation)

Owner's Name : MaryAnn Fletcher

Pet Name: Ice

Microchip Number 956000012082520

# **Glossary of Genetic Terms (Results)**



I accept terms of service and privacy policy!

### NEGATIVE / CLEAR [NO VARIANT DETECTED]

No presence of the variant (mutation) has been detected. The animal is clear of the disease and will not pass on any disease-causing mutation.

#### CARRIER [ONE COPY OF THE VARIANT DETECTED]

This is also referred to as HETEROZYGOUS. One copy of the normal gene and copy of the affected (mutant) gene has been detected. The animal will not exhibit disease symptoms or develop the disease. Consideration needs to be taken if breeding this animal – if breeding with another carrier or affected or unknown then it may produce an affected offspring.

#### POSITIVE / AT RISK [TWO COPIES OF THE VARIANT DETECTED]

Two copies of the disease gene variant (mutation) have been detected also referred to as HOMOZYGOUS for the variant. The animal may show symptoms (affected) associated with the disease. Appropriate treatment should be pursued by consulting a Veterinarian.

#### POSITIVE HET EROZYGOUS [ONE COPY OF THE DOMINANT VARIANT DETECTED]

Also referred to as POSITIVE ONE COPY or POSITIVE HETEROZYGOUS. This result is associated with a disease that has a dominant mode of inheritance. One copy of the normal gene (wild type) and affected (mutant) gene is present. Appropriate treatment should be pursued by consulting a Veterinarian. This result can still be used to produce a clear offspring.

#### NORMAL BY PARENTAGE HISTORY

The sample submitted has had its parentage verified by DNA. By interrogating the DNA profiles of the Dam, Sire and Offspring this information together with the history submitted for the parents excludes this animal from having this disease. The controls run confirm that the dog is NORMAL for the disease requested.

#### **NORMAL BY PEDIGREE**

The sample submitted has had its parentage verified by Pedigree. The pedigree has been provided and details(genetic testing reports) of the parents have been included. Parentage could not be determined via DNA profile as no sample was submitted.

#### **NO RESULTS AVAILABLE**

Insufficient information has been provided to provide a result for this test. Sire and Dam information and/or sample may be required. This result is mostly associated with tests that have a patent/license and therefore certain restrictions apply. Please contact the laboratory to discuss.

#### **INDET ERMINABLE**

The sample submitted has failed to give a conclusive result. This result is mainly due to the sample failing to "cluster" or result in the current grouping. A recollection is required at no charge.

#### **DNA PROFILE**

Also known as a DNA fingerprint. This is unique for the animal. No animal shares the same DNA profile. An individual's DNA profile is inherited from both parents and can be used for verifying parentage (pedigrees). This profile contains no disease or trait information and is simply a unique DNA signature for that animal.

# **Glossary of Genetic Terms (Results)**



I accept terms of service and privacy policy!

#### PARENTAGE VERIFICATION/ QUALIFIES/CONFIRMED OR DOES NOT QUALIFY/EXCLUDED

Parentage is determined by examining the markers on the DNA profile. A result is generated and stated for all DNA parentage requests. Parentage confirmation reports can only be generated if a DNA profile has been carried out for Dam, Offspring and possible Sire/s.

#### PENDING

PENDING

### TRAIT (PHENOTYPE)

A feature that an animal is born with (a genetically determined characteristic).Traits are a visual phenotype that range from colour to hair length, and also includes certain features such as tail length. If an individual is AFFECTED for a trait then it will show that characteristic eg.AFFECTED for the B (Brown) Locus or bb will be brown/chocolate.

#### **POSITIVE – SHOWING THE PHENOTYPE**

The animal is showing the trait or phenotype tested.

#### **CLARIFICATION OF GENETIC TESTING**

The goal of genetic testing is to provide breeders with relevant information to improve breeding practices in the interest of animal health. However, genetic inheritance is not a simple process, and may be complicated by several factors. Below is some information to help clarify these factors.

The goal of genetic testing is to provide breeders with relevant information to improve breeding practices in the interest of animal health. However, genetic inheritance is not a simple process, and may be complicated by several factors. Below is some information to help clarify these factors.

1) Some diseases may demonstrate signs of what Geneticists call "genetic heterogeneity". This is a term to describe an apparently single condition that may be caused by more than one mutation and/or gene

2) It is possible that there exists more than one disease that presents in a similar fashion and segregates in a single breed. These conditions -although phenotypically similar - may be caused by separate mutations and/or genes.

3) It is possible that the disease affecting your breed may be what Geneticists call an "oligogenic disease". This is a term to describe the existence of additional genes that may modify the action of a dominant gene associated with a disease. These modifier genes may for example give rise to a variable age of onset for a particular condition, or affect the penetrance of a particular mutation such that some animals may never develop the condition.

The range of hereditary diseases continues to increase and we see some that are relatively benign and others that can cause severe and/or fatal disease. Diagnosis of any disease should be based on pedigree history, clinical signs, history (incidence) of the disease and the specific genetic test for the disease. Penetrance of a disease will always vary not only from breed to breed but within a breed, and will vary with different diseases. Factors that influence penetrance are genetics, nutrition and environment. Although genetic testing should be a priority for breeders, we strongly recommend that temperament and phenotype also be considered when breeding.

Orivet Genetic Pet Care aims to frequently update breeders with the latest research from the scientific literature. If breeders have any questions regarding a particular condition, please contact us on (03) 9534 1544 or admin@orivet.com and we will be happy to work with you to answer any relevant questions.