

Genetic Profile Test Results

Horse: BDF Tru Risky Rolex

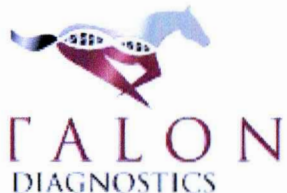
Owner: Stephen Devolt

HORSE ID: 022619 023

PACK: APHA

Owner and Owner Information

Horse	BDF Tru Risky Rolex	DOB	2013-06-13
Breed	American Paint Horse	Age	5 years, 9 months
Color	Black	Sex	stallion
Discipline	Breeding	Height	14.3 hands
Registry	American Paint Horse Association	Reg Number	1033662
 sire	A Tru Rolex	Dam	Diaman HA Lil Risky
 sire Reg & No.	American Paint Horse Association 334913	Dam Reg & No.	American Paint Horse Association 836224
Comments		
Owner	Stephen Devolt	Address	3696 W LAMBERT RD
Phone	8173042432 / 8173042432	City, State	WEATHERFORD, Texas
Email	stephen.devolt@yahoo.com	Postal Code	76088



Genetic Profile Test Results

Horse: BDF Tru Risky Rolex

Owner: Stephen Devolt

HORSE ID: 022619 023

PACK: APHA

Its Summary

Color: BDF Tru Risky Rolex has two Black alleles and no Red alleles, indicating the base coat color appears Black. One Tobiano allele was detected which may result in White markings. As a result of the allele count in each of the following, he has a minimum 100% chance of passing Black, and 50% Tobiano to any offspring.

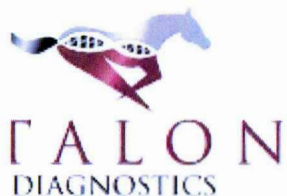
Genotype: aa, EE, TO/n

Myostatin: Sprint Type

6-Panel: HYPP n/n, PSSM1 n/n, MH n/n, GBED n/n, HERDA n/n, LWO n/n

Recessive Disease Panel: BDF Tru Risky Rolex has not tested positive for any recessive disease alleles on this panel.

Please note: Your analysis is ongoing and may include some regions marked with an asterisk denoting the following.
* Discovery - This gene detection is in the early stages of discovery and will have varying reliability results.
** Inconclusive - Not a bad omen! Simply put, the gene of interest did not reveal itself (neither a positive nor a negative; no result, therefore unknown).



Genetic Profile Test Results

Horse: BDF Tru Risky Rolex

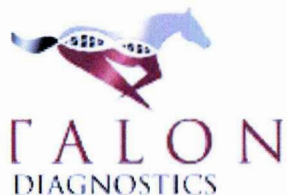
Owner: Stephen Devolt

HORSE ID: 022619 023

PACK: APHA

: Color Results

Agouti	-/-	ASIP	aa - No dominant Agouti alleles detected; restricts any Black base to appear Bay.	More about A
Black/Red	+/+	MC1R	EE - Two Black alleles detected and no Red.	More about E
Brindle	-/-	IKBK	No Brindle/IP alleles detected.	More about IP
Grey	-/-	STX17A	No Grey alleles detected.	More about G
Champagne	-/-	SLC36A1	No Champagne alleles detected.	More about CH
Cream	-/-	SLC45A2	No Cream alleles detected.	More about CR
Dun	-/-,-/-	TBX3	nd2/nd2 (non-dun). Two non-dun2 alleles detected. No Dun or non-Dun Primitive Marking alleles detected.	More about Dun
Pearl	-/-	SLC45A2	No Pearl alleles detected.	More about pri
Silver	-/-	PMEL17	No Silver alleles detected.	More about Z



Genetic Profile Test Results

Horse: BDF Tru Risky Rolex

Owner: Stephen Devolt

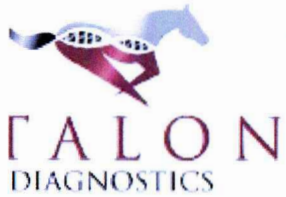
HORSE ID: 022619 023

PACK: APHA

: Color Results, continued

Patterns Results

Dominant White	-/-	<i>KIT</i>	No Dominant White alleles detected (DW1-21).	More about DW
Frame Overo (LWO)	-/-	<i>EDNRB</i>	No Frame Overo (LWO) alleles detected.	More about LWO
Leopard Complex Spotting (LP)	-/-	<i>TRPM1</i>	No Leopard Complex Spotting (LP) alleles detected.	More about LP
Pattern 1 (LP modification)	-/-	<i>RFWD3</i>	No Pattern 1 (LP modification) alleles detected.	More about PATN1
Splashed White (MITF)	-/-,-/-	<i>MITF</i>	No Splashed White 1 nor Splashed White 3 alleles detected.	More about SW (MITF)
Splashed White (PAX3)	-/-,-/-	<i>PAX3</i>	No Splashed White 2 nor Splashed White 4 alleles detected.	More about SW (PAX3)
Sabino 1	-/-	<i>KIT</i>	No Sabino 1 alleles detected.	More about SB1
Tobiano	+/-	<i>ECA3</i>	TO/n - One Tobiano allele detected.	More about TO



Genetic Profile Test Results

Horse: BDF Tru Risky Rolex

Owner: Stephen Devolt

HORSE ID: 022619 023

PACK: APHA

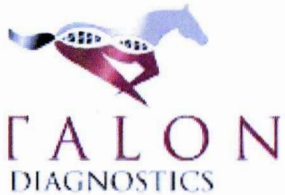
th Genetics 1

Immune System

Foal Immunodeficiency Syndrome	-/-	SLC5A3	No Foal Immunodeficiency Syndrome alleles detected.	More about fis
Severe Combined Immunodeficiency	-/-	DNAPK	No Severe Combined Immunodeficiency alleles detected.	More about scid
West Nile*	-/-	OAS1	Normal susceptibility to West Nile Virus symptoms.	More about WNVR*

Muscle Disorders

Glycogen Branching Enzyme Deficiency	-/-	GBE1	No Glycogen Branching Enzyme Deficiency alleles detected.	More about gbed
Hyperkalemic Periodic Paralysis	-/-	SCN4A	No Hyperkalemic Periodic Paralysis alleles detected.	More about HYPP
Malignant Hyperthermia	-/-	RYR1	No Malignant Hyperthermia alleles detected.	More about MH
Myotonia	-/-	CLCN4	No Myotonia alleles detected.	More about myt
Polysaccharide Storage Myopathy (type 1)	-/-	GYS1	No Polysaccharide Storage Myopathy (type 1) alleles detected.	More about PSSM1



Genetic Profile Test Results

Horse: BDF Tru Risky Rolex

Owner: Stephen Devolt

HORSE ID: 022619 023

PACK: APHA

th Genetics 2

ologic Disorders

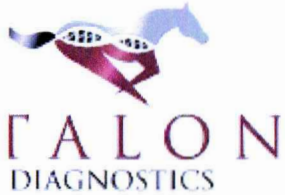
Cerebellar Abiotrophy	-/-	<i>MUTYH</i>	No Cerebellar Abiotrophy alleles detected.	More about ca
Lavender Foal Syndrome	-/-	<i>MYO5A</i>	No Lavender Foal Syndrome alleles detected.	More about lfs

oductive Disorders

Androgen Insensitivity	-/-	<i>AR</i>	No Androgen Insensitivity alleles detected.	More about as
IAR - Subfertility*	-/-, +/+	<i>FKBP6</i>	Two IAR Subfertility* alleles detected.	More about iar*

Disorders

Hereditary Equine Regional Dermal Asthenia	-/-	<i>PPIB</i>	No Hereditary Equine Regional Dermal Asthenia alleles detected.	More about herda
Junctional Epidermolysa Bullosis (type 1)	-/-	<i>LAMC2</i>	No Junctional Epidermolysa Bullosis (type 1) alleles detected.	More about jeb1
Junctional Epidermolysa Bullosis (type 2*)	-/-	<i>LAMA3</i>	No Junctional Epidermolysa Bullosis (type 2*) alleles detected.	More about jeb2*



Genetic Profile Test Results
Horse: BDF Tru Risky Rolex
Owner: Stephen Devolt

HORSE ID: 022619 023

PACK: APHA

Genetics

Genetics

Lordosis*	+/-,+/-,+/-,+/-	ECA20	One of each Lordosis* alleles detected; likely carrier.	More about L*
Curiosity/Vigilance*	+/+	DRD4	Two Curiosity alleles detected; likely more curious than vigilant.	More about Cur/Vig
Sprint/Speed	+/+	MSTN	Two Sprint alleles detected; likely Sprint ability over Endurance.	More about MSTN
Gait	-/-	DMRT3	No Gait alleles detected.	More about Gaited

Additions for 2019

Equine Recurrent Uveitis (Risk)*	***	ECA18	***DNA Minipanel PLUS only, inquire about upgrade.	More about ERU
Equine Recurrent Uveitis (Severity)*	***	ECA20	***DNA Minipanel PLUS only, inquire about upgrade.	More about ERU
Equine Metabolic Syndrome*	***	FAM174A	***DNA Minipanel PLUS only, inquire about upgrade.	More about EMS
Leptospirosis Risk*	***	FAM174A	***DNA Minipanel PLUS only, inquire about upgrade.	More about LAM
Squamous Cell Carcinoma*	***	DDB2	***DNA Minipanel PLUS only, inquire about upgrade.	More about SCC
Tiger Eye*	***	SLC24A5	***DNA Minipanel PLUS only, inquire about upgrade.	More about Tiger Eye
Dwarfism*	***	ACAN	***DNA Minipanel PLUS only, inquire about upgrade.	More about Dwarfism

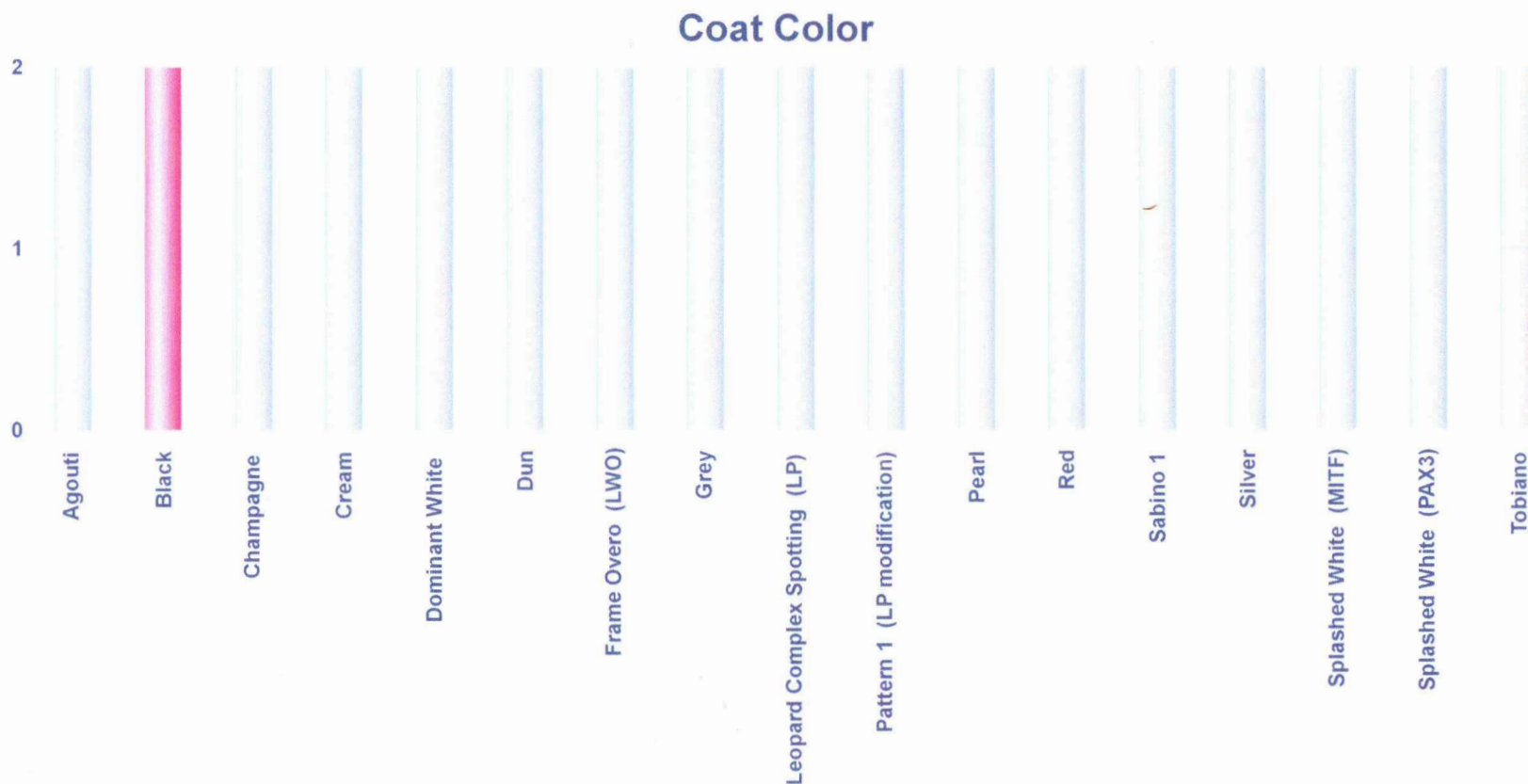


Genetic Profile Test Results
Horse: BDF Tru Risky Rolex
Owner: Stephen Devolt

HORSE ID: 022619 023

PACK: APHA

Coat Color Inheritance Probabilities



Coat Color Inheritance Probabilities: The bar graph above depicts the number of alleles for specific coat color phenotypes based upon your horse's genetic testing results. Completely filled red bar represents two such alleles (homozygous) and a half-filled yellow bar represents one such allele (heterozygous).



Genetic Profile Test Results

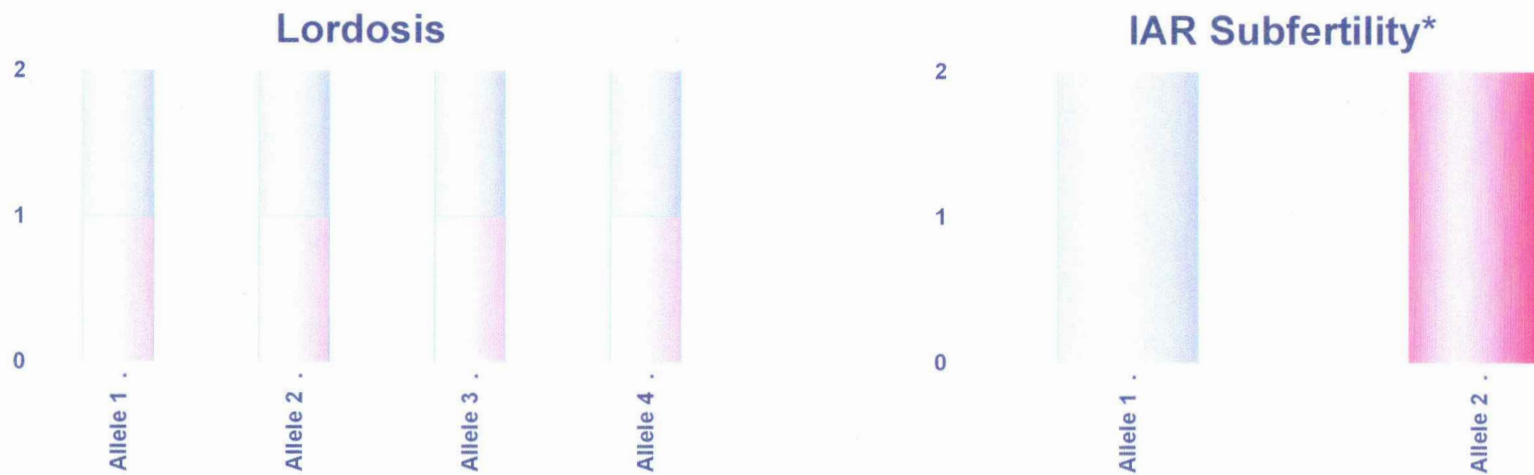
Horse: BDF Tru Risky Rolex

Owner: Stephen Devolt

HORSE ID: 022619 023

PACK: APHA

Genetic Profile Test Results



Possible carrier
-currently studies only
proven in Saddlebreds

Not affected

Multi-allele Risk Charts: Each chart represents a trait, and each bar indicates a distinct risk or allele presence. These act in combination to produce the trait. A red bar indicates the horse carries 2 risk alleles at the site; a party-yellow bar indicates 1 risk allele; and a fully-grey bar indicates 0 risk alleles. If all bars are red, then the horse carries two risk alleles at each risk site and is likely affected. If all bars contain yellow or red, but are not all red, then the horse is likely a carrier. Otherwise, the horse is not a likely a carrier of the tested trait.



Genetic Profile Test Results

Horse: BDF Tru Risky Rolex

Owner: Stephen Devolt

HORSE ID: 022619 023

PACK: APHA

Learning Genetics & More Info

- Allele:** One of two or more alternative forms of a gene that arise by mutation and are found at the same place on a chromosome.
- Alleles: Heterozygous vs. homozygous?** Allele calls are written in a way that denotes their origin and whether they are DOMINANT (uppercase) or recessive (lowercase). For example, at MC1R (also known as extension), Black is dominant and thus written as "E" whereas Red is recessive and thus denoted as "e". Therefore, an EE horse is homozygous for Black (and thus appears black), an ee horse is homozygous for Red (appears Red), and an Ee horse is heterozygous (shows the dominant allele, thus is Black).
A unit of heredity that is transferred from a parent to offspring and is thought to determine some characteristic of the offspring.
- Genotype:** The genetic constitution or make up of an individual organism.
- Heterozygous:** A pair of genes which are different (not the same). One is typically dominant and one recessive.
- Homozygous:** A pair of genes that are identical (of one type).
- Phenotype:** The observable or visible characteristics of an individual resulting from their genotype or the interaction of their various genes and environment.

Results depicted in this report do not constitute veterinary or medical advice. Any medical or veterinary advice should be sought from your veterinarian regarding these results or health issues or questions you may have about your animal. Breed, sex, gene interaction, unknown genes and individual variances may impact the results, phenotypes, and outcomes in any animal in unknown and unpredictable ways. Please be advised that your animals' health is important to us and you should feel free to contact us should you have any questions or feedback on our diagnostic platform, results reporting, or general questions. We value your input and thank you!