

CATTLE GENETIC MARKER TEST REPORT

Provided Information:		Case:	IMC582
Name:	CLG AYALA	Date Received:	29-Jul-2026
Registration:	31528	Report Issue Date:	05-Aug-2026
		Report ID:	5988-2568-6658-2135
		Verify report at vgl.ucdavis.edu/verify	
DOB: 05/20/2026 Sex: Female Breed: HighPark			

RESULTS AND INTERPRETATION

Permanent Record.

GENETIC MARKERS

LOCUS	TYPE	LOCUS	TYPE	LOCUS	TYPE
<i>BM1818</i>	260	<i>BM1824</i>	180/182	<i>BM2113</i>	133/135
<i>BRR</i>	258	<i>CYP21</i>	202	<i>ETH003</i>	115/117
<i>ETH10</i>	219/221	<i>ETH225</i>	144/150	<i>INRA23</i>	196/208
<i>RM006</i>	116/118	<i>RM067</i>	90	<i>SPS115</i>	248/252
<i>TGLA122</i>	143/151	<i>TGLA126</i>	117/123	<i>TGLA227</i>	77/93

CATTLE GENETIC MARKER TEST REPORT

Client/Owner/Agent Information: CASSAUNDRA GRIMM 23915 PALM AVENUE HOWEY IN THE HILLS, FL 34737	Case: IMC582 Date Received: 29-Jul-2026 Report Issue Date: 05-Aug-2026 Report ID: 5988-2568-6658-2135 Verify report at vgl.ucdavis.edu/verify
Name: CLG AYALA	

Additional Information

If testing for a disease or a disorder was performed and results indicate the animal is affected or at risk, we recommend contacting your veterinarian for further clinical evaluation and for additional information on disease and management.

The Veterinary Genetics Laboratory is an institutional member of ISAG. DNA types are reported according to standardized nomenclature for those markers tested in the ISAG core panel.

For more detailed information on Genetic Marker test results, please visit our website at:
vgl.ucdavis.edu/services/parentage

For terms and conditions of testing, please see vgl.ucdavis.edu/about/terms-and-conditions

Results are determined using PCR-based methods. The results relate only to the sample tested as identified by the submitter (for example, identity and/or breed).

Report authorized by Dr. Rebecca Bellone, VGL Director

Veterinary Genetics Laboratory · University of California Davis · One Shields Ave · Davis, CA 95616
vgl.ucdavis.edu · (530) 752-2211

CATTLE COAT COLOR TEST REPORT

Provided Information:		Case:	IMC582
Name:	CLG AYALA	Date Received:	29-Jul-2026
Registration:	31528	Report Issue Date:	05-Aug-2026
		Report ID:	0390-9010-1258-8064
		Verify report at vgl.ucdavis.edu/verify	
DOB: 05/20/2026 Sex: Female Breed: HighPark			

RESULT

DILUTION (PMEL17)	Dh/N
MC1R (EXTENSION)	E^D/E^D

INTERPRETATION

One copy of the PMEL17-delTTC dilution variant. Coat color is gray or pale-red.

Dominant black. This animal cannot produce red offspring.

CATTLE COAT COLOR TEST REPORT

Client/Owner/Agent Information: CASSAUNDRA GRIMM 23915 PALM AVENUE HOWEY IN THE HILLS, FL 34737	Case: IMC582 Date Received: 29-Jul-2026 Report Issue Date: 05-Aug-2026 Report ID: 0390-9010-1258-8064 Verify report at vgl.ucdavis.edu/verify
Name: CLG AYALA	

Additional Information

If testing for a disease or a disorder was performed and results indicate the animal is affected or at risk, we recommend contacting your veterinarian for further clinical evaluation and for additional information on disease and management.

For more detailed information on Cattle Coat Color test results, please visit our website at:
vgl.ucdavis.edu/test/mc1r-cattle
vgl.ucdavis.edu/test/cattle-dilution

For terms and conditions of testing, please see vgl.ucdavis.edu/about/terms-and-conditions

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The coat color phenotype in cattle depends on multiple genes. The Veterinary Genetics Laboratory offers testing for Extension (*MC1R* gene) and Dilution (*PMEL17* gene).

The table below shows the expected phenotype based on the various possible genotype combinations of these two genes. While these two loci together explain some coat color phenotypes in Highland cattle, it is important to note that other, yet unknown, genes may influence the resulting coat color observed and the animal may have a different phenotype than what is predicted by the Extension and Dilution genotypes alone.

Extension (<i>MC1R</i>)	Dun Dilution (<i>PMEL17</i>)	Coat Color Phenotype Predictions
E+/E+	N/N	Red
E+/e	N/N	Red
e/e	N/N	Red
E+/E+	Dh/N	Yellow
E+/e	Dh/N	Yellow
e/e	Dh/N	Yellow
E+/E+	Dh/Dh	White/cream
E+/e	Dh/Dh	White/cream
e/e	Dh/Dh	White/cream
ED/ED	N/N	Black
ED/E+	N/N	Black
ED/e	N/N	Black
ED/ED	Dh/N	Dun
ED/E+	Dh/N	Dun
ED/e	Dh/N	Dun
ED/ED	Dh/Dh	Silver Dun (CAN) or Silver (USA)*
ED/E+	Dh/Dh	Silver Dun (CAN) or Silver (USA)*
ED/e	Dh/Dh	Silver Dun (CAN) or Silver (USA)*

Table 1: Coat color phenotypes based on Extension and Dilution genotypes. *Adapted from Schmutz SM, Dreger DL. (2013) doi: 10.1111/j.1365-2052.2012.02361.x.*

* The Canadian Highland Cattle Society uses the term "Silver Dun" whereas the American Highland Cattle Association refers to this phenotype as "Silver"

For more detailed information about these coat color genes, please visit our website at <https://vgl.ucdavis.edu/test/mc1r-cattle> and <https://vgl.ucdavis.edu/test/cattle-dilution>

DEXTER GENETIC TEST REPORT

Provided Information:		Case:	IMC582
Name:	CLG AYALA	Date Received:	29-Jul-2026
Registration:	31528	Report Issue Date:	05-Aug-2026
		Report ID:	1843-6395-7714-2191
		Verify report at vgl.ucdavis.edu/verify	
DOB: 05/20/2026 Sex: Female Breed: HighPark			

RESULT	INTERPRETATION
MC1R (EXTENSION)	Animal is homozygous for dominant black and cannot have red offspring.
E^D/E^D	
Dun (TYRP1)	
Not Requested	
Dexter Dilution (SLC45A2)	
Not Requested	
Pulmonary Hypoplasia with Anasarca (PHA)	
Not Requested	
Polled vs. Horned	
Not Requested	
Bulldog Dwarfism (BD1)	Carrier, has one copy of the Dexter BD1 Bulldog mutation. Breeding to another carrier will produce 25% affected calves.
N/BD1	
Bulldog Dwarfism (BD2)	
Not Requested	

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Name: CLG AYALA	

Additional Information

If testing for a disease or a disorder was performed and results indicate the animal is affected or at risk, we recommend contacting your veterinarian for further clinical evaluation and for additional information on disease and management.

For more detailed information on Dexter Genetic test results, please visit our website at:
vgl.ucdavis.edu/services/cattle/dexter-tests

For terms and conditions of testing, please see vgl.ucdavis.edu/about/terms-and-conditions

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