

# CATTLE COAT COLOR TEST REPORT

Provided Information:

Name: CLG GASPARD

Registration: 31046

Case: IMC414

Date Received: 15-Oct-2025 Report Issue Date: 20-Oct-2025

*Report ID:* 9673-8107-4480-3117

Verify report at vgl.ucdavis.edu/verify

DOB: 09/19/2025 Sex: Male Breed: American Highland

**RESULT** 

## INTERPRETATION

DILUTION (PMEL17)	Dh/N	One copy of the PMEL17-delTTC dilution variant. Coat color is gray or pale-red.
MC1R (EXTENSION)	E <sup>D</sup> /E <sup>+</sup>	Dominant black, carrier of wild type.



## CATTLE COAT COLOR TEST REPORT

Client/Owner/Agent Information: CASSAUNDRA KELLER 23915 PALM AVENUE HOWEY IN THE HILLS, FL 34737

 Case:
 IMC414

 Date Received:
 15-Oct-2025

 Report Issue Date:
 20-Oct-2025

 Report ID:
 9673-8107-4480-3117

Verify report at vgl.ucdavis.edu/verify

Name: CLG GASPARD

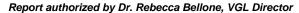
#### **Additional Information**

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

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).







# **Highland Coat Color**

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 (MC1R)	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.* 

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

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



# DEXTER GENETIC TEST REPORT

Provided Information:

Name: CLG GASPARD

Registration: 31046

Case:
Date Received:
Report Issue Date:

**IMC414** 15-Oct-2025 20-Oct-2025

Report ID:

6158-5632-2539-7164

Verify report at vgl.ucdavis.edu/verify

DOB: 09/19/2025 Sex: Male Breed: American Highland

## **RESULT**

## INTERPRETATION

MC1R (EXTENSION)	Animal has one copy of dominant black and one copy of wild type (red).	
E <sup>D</sup> /E <sup>+</sup>		
Dun (TYRP1)		
Not Requested		
Dexter Dilution (SLC45A2)		
Not Requested		
Pulmonary Hypoplasia with Anasarca (PHA)		
Not Requested		
Polled vs. Horned		
Not Requested		
Bulldog Dwarfism (BD1)	Normal, does not have the Dexter BD1 Bulldog mutation.	
N/N	January Hara Hara Hara Banas Danies D	
Bulldog Dwarfism (BD2)	Normal, does not have the Dexter BD2 Bulldog mutation.	
N/N		



## DEXTER GENETIC TEST REPORT

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 Report Issue Date:
 20-Oct-2025

 Report ID:
 6158-5632-2539-7164

Verify report at vgl.ucdavis.edu/verify

Name: CLG GASPARD

#### **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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