

CATTLE GENETIC MARKER TEST REPORT

Provided Information:		Case:	MJH55
Name:	HCC EPHRAIM	Date Received:	08-Feb-2021
Registration:		Report Issue Date:	15-Feb-2021
		Report ID:	4454-6102-1498-6102
Verify report at www.vgl.ucdavis.edu/verify			
DOB: 01/29/2021 Sex: Male Breed: Mini-Mid Jerseys			
Sire:	BLUE MILL MEADOWS TITUS	Dam:	SOUTH HOUSE BUTTERCUP
Reg:	AMJ1607P	Reg:	AMJ1425P
Microchip:		Microchip:	

RESULTS AND INTERPRETATION

Permanent Record.

GENETIC MARKERS

LOCUS	TYPE	LOCUS	TYPE	LOCUS	TYPE
<i>BM1818</i>	266	<i>BM1824</i>	178/182	<i>BM2113</i>	135/137
<i>BRR</i>	250/254	<i>CYP21</i>	187/198	<i>ETH003</i>	117
<i>ETH10</i>	215	<i>ETH225</i>	144/148	<i>INRA23</i>	206/214
<i>RM006</i>	110/118	<i>RM067</i>	90/102	<i>SPS115</i>	248/252
<i>TGLA122</i>	149/169	<i>TGLA126</i>	117	<i>TGLA227</i>	81/91
<i>TGLA53</i>	168/170				

CATTLE GENETIC MARKER TEST REPORT

Client/Owner/Agent Information: JULIA FLEMING 221 HOPE LN DUNLAP, TN 37327	Case: MJH55 Date Received: 08-Feb-2021 Report Issue Date: 15-Feb-2021 Report ID: 4454-6102-1498-6102 Verify report at www.vgl.ucdavis.edu/verify
Name: HCC EPHRAIM	

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 markers in the ISAG panel.

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

For terms and conditions of testing, please see www.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

DEXTER GENETIC TEST REPORT

<p><i>Provided Information:</i></p> <p><i>Name:</i> HCC EPHRAIM</p> <p><i>Registration:</i></p>	<p><i>Case:</i> MJH55</p> <p><i>Date Received:</i> 08-Feb-2021</p> <p><i>Report Issue Date:</i> 16-Feb-2021</p> <p><i>Report ID:</i> 5669-3546-9620-3193</p> <p style="text-align: center; font-size: small;">Verify report at www.vgl.ucdavis.edu/verify</p>
<p><i>DOB:</i> 01/29/2021 <i>Sex:</i> Male <i>Breed:</i> Mini-Mid Jerseys</p>	
<p><i>Sire:</i> BLUE MILL MEADOWS TITUS</p> <p><i>Reg:</i> AMJ1607P</p> <p><i>Microchip:</i></p>	<p><i>Dam:</i> SOUTH HOUSE BUTTERCUP</p> <p><i>Reg:</i> AMJ1425P</p> <p><i>Microchip:</i></p>

RESULT

INTERPRETATION

MC1R (EXTENSION)	
Not Requested	
Dun (TYRP1)	
Not Requested	
Pulmonary Hypoplasia with Anasarca (PHA)	
Not Requested	
Polled vs. Horned	POLLED. One copy of Polled-Celtic and 1 copy of Polled-Friesian molecular markers are present. All offspring will be polled.
Pc/Pf	
Bulldog Dwarfism (BD1)	Normal, does not have the Dexter BD1 Bulldog mutation.
N/N	
Bulldog Dwarfism (BD2)	
Not Requested	

DEXTER GENETIC TEST REPORT

Client/Owner/Agent Information: JULIA FLEMING 221 HOPE LN DUNLAP, TN 37327	Case: MJH55 Date Received: 08-Feb-2021 Report Issue Date: 16-Feb-2021 Report ID: 5669-3546-9620-3193 Verify report at www.vgl.ucdavis.edu/verify
Name: HCC EPHRAIM	

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:
www.vgl.ucdavis.edu/services/cattle/dexter-tests

For terms and conditions of testing, please see www.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

Provided Information:		Case:	MJH55
Name:	HCC EPHRAIM	Date Received:	08-Feb-2021
Registration:		Report Issue Date:	16-Feb-2021
		Report ID:	2701-3040-0840-3104
Verify report at www.vgl.ucdavis.edu/verify			
DOB: 01/29/2021 Sex: Male Breed: Mini-Mid Jerseys			
Sire:	BLUE MILL MEADOWS TITUS	Dam:	SOUTH HOUSE BUTTERCUP
Reg:	AMJ1607P	Reg:	AMJ1425P
Microchip:		Microchip:	

Beta Casein Result	Kappa Casein Result	Beta Lactoglobulin Result
A2/I	B/B	B/B

Beta Casein (A2 Genotyping) Interpretation

In the A2C nomenclature for A2 genotyping, the Beta Casein above corresponds to A2/A2.

Milk yield and protein content. The A2 variant has been shown to have a positive association with milk yield and protein content. The expanded beta casein test reflected in this report detects variants A1, A2, A3, B, C, D, E, F, G, H1, H2, I, K and L.

Based on the aminoacid present in position 67 these variants can be classified into 2 groups - A1 and A2. Variants in the A1-group (Histidine) are A1, B, C, F and G. Variants in the A2-group (Proline) are A2, A3, D, E, H1, H2, I, K and L. The levels of bioactive peptide beta-casomorphin 7 (BCM7) produced from the metabolism of beta casein is several-fold higher for variants in the A1 group than in the A2 group. Higher levels of BCM7 have been associated with negative health effects in humans. Relative to levels of BCM7 production, variants within each group behave similarly but may differ in other properties.

Kappa Casein Interpretation

Protein yield and percentage. The A variant and AA genotype are associated with higher milk production. The B variant and BB genotype are associated with increased milk protein and casein content, and better cheese yield. Relative to protein content and cheese production, BB is the most favorable genotype, AB is intermediate and AA is the least favorable.

Beta Lactoglobulin Interpretation

Milk yield and whey protein content. The A variant is associated with increased milk yield and whey protein content. The B variant is associated with increased casein and fat content and is favorable for cheese production.

Client/Owner/Agent Information: JULIA FLEMING 221 HOPE LN DUNLAP, TN 37327	Case: MJH55 Date Received: 08-Feb-2021 Report Issue Date: 16-Feb-2021 Report ID: 2701-3040-0840-3104 Verify report at www.vgl.ucdavis.edu/verify
Name: HCC EPHRAIM	

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 Milk Protein test results, please visit our website at:
www.vgl.ucdavis.edu/panel/cattle-milk-protein-panel

For terms and conditions of testing, please see www.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