

## GENETIC TRAITS AND CARRIER CODES

**C = carrier**

**F = tested free or non-carrier**

**S = tested true carrier (homozygous)**

### Master List of Genetic Codes and Carrier Codes

Gene Name	Description	Gene and Expression Code
<b>BLAD</b>	<b>Bovine Leukocyte Adhesion Deficiency</b> (deficiency of a normally occurring protein needed for white blood cells or leukocytes, which are body's infection fighters)	<b>BLC</b> = tested carrier of BLAD <b>BLF</b> = tested non-carrier of BLAD
<b>Mule foot</b>	<b>Mule-Foot</b> (toes of foot are joined, giving animal a single hoof, instead of cloven ones)	<b>MFC</b> = tested carrier of Mule foot <b>MFF</b> = tested non-carrier of Mule foot
<b>DUMPS</b>	<b>Deficiency of Uridine Monophosphate Synthase</b> (one of many enzymes contributing to normal metabolic processes)	<b>DPC</b> = tested carrier of DUMPS <b>DPF</b> = tested non-carrier of DUMPS
<b>CVM</b>	<b>Complex Vertebral Malformation</b> (causes still-born calves, abortions, and early embryonic losses)	<b>CVC</b> = tested carrier of CVM <b>CVF</b> = tested non-carrier of CVM
<b>Factor X1</b>	<b>Factor X1</b> (blood clotting disorder)	<b>XIC</b> = tested carrier of Factor X1 <b>XIF</b> = tested non-carrier of Factor X1
<b>CIT</b>	<b>Citrullinemia</b> (accumulation of ammonia and other toxics in blood in baby calves)	<b>CNC</b> = tested carrier of Citrullinemia <b>CNF</b> = tested non-carrier of Citrullinemia
<b>Brachyspina</b>	<b>Brachyspina</b> (causes abortion and stillborn, shortened spinal cord, long legs and abnormal organs)	<b>BYC</b> = tested carrier of Brachyspina <b>BYF</b> = tested non-carrier of Brachyspina



<b>Polled</b>	Animals without horns (reported born hornless - Not Tested).	<b>POR</b> = coded by owner, no genetic test
<b>Polled (Current-Indirect Test)</b>	Indirect Test	<b>POS</b> = tested true polled (homozygous PP) <b>POC</b> = tested carrier of polled (heterozygous Pp) <b>POF</b> = tested free of polled
<b>Polled (Future)</b>	When a direct test becomes available. Direct test code will "trump" test code on animal record	
<b>Cholesterol Deficiency</b>	Cholesterol Deficiency	<b>CDF</b> = tested non-carrier / free of cholesterol deficiency <b>CDC</b> = tested carrier of cholesterol deficiency (heterozygous) <b>CDS</b> = tested true carrier of cholesterol deficiency (homozygous)

### Suggested Genetic Conditions under Investigation

Gene Name	Description	Gene and Expression Code
<b>BLIRD</b>	Bovine Lymphocyte Intestinal Retention Defect	<b>LRF</b> = tested non-carrier / free of BLIRD <b>LRC</b> = tested carrier of BLIRD (heterozygous) <b>LRS</b> = tested true carrier of BLIRD (homozygous)
<b>Early Onset Muscle Weakness</b>		<b>MWF</b> = tested non-carrier / free of Early Onset Muscle Weakness <b>MWC</b> = tested carrier of Early Onset Muscle Weakness (heterozygous) <b>MWS</b> = tested true carrier of Early Onset Muscle Weakness (homozygous)
<b>SLICK</b>	S plus a variant number	