List of genetic traits Dairy cattle

			Not carrier of defect/trait		Single carrier of defect/trait			Double carrier of defect/trait			Test	
Breed	Scientific name	Trait	Code	Result	Code	Result	Phenotype	Code	Result	Phenotype	Lab	Genomic test
HOL	Bovine Leukocyte Adhesion Deficiency (BLAD)	Blad	BLF	Free	BLC	Carrier	Normal	BLS	Carrier	Lethal after birth	X	X
HOL	Complex Vertebral Malformation (CVM)	CVM	CVF	Free	CVC	Carrier	Normal	(CVS)		Stillborn	X	X
HOL	Zinc deficiency (Adema disease)	Zinc deficiency	ZDF	Free	ZDC	Carrier	Normal	ZDS	Carrier	Physical effect/lethal after birth		
HOL	Syndactylism (Mulefoot)	Mulefoot	MFF	Free	MFC	Carrier	Normal	MFS	Carrier	Physical malformation, not lethal	X	
HOL	Brachyspina (BY)	BY	BYF	Free	BYC	Carrier	Normal	(BYS)		Physical malformation, Stillborn	X	
HOL	Deficiency of Uridine Monophosphate Synthase (DUMPS)	DUMPS	DPF	Free	DPC	Carrier	Normal	(DPS)		Embryonic death	X	
HOL	Factor XI deficiency (blood clotting disorder)	Factor XI deficiency	XIF	Free	XIC	Carrier	Haemophilia symptoms	XIS	Carrier	Haemophilia symptoms	X	
HOL	Citrullinemia	Citrullinaemia	CNF	Free	CNC	Carrier	Normal	(CNS)		Physical effect/lethal after birth	X	
HOL	Cholesterol deficiency (HDC)	HDC	CDF	Free	CDC	Carrier	Normal	CDS	Carrier	Lethal after birth	X	
HOL	Hereditary cardiomyopathy	HC	HCF	Free	HCC	Carrier	Normal	HCS	Carrier	Physical malformation of the heart		
HOL	Holstein Haplotype 1 (HH1)	HH1	HH1F	Free	HH1C	Carrier	Normal	(HH1S)		Embryonic death	X	X
HOL	Holstein Haplotype 2 (HH2)	HH2	HH2F	Free	HH2C	Carrier	Normal	(HH2S)		Embryonic death	X	
HOL	Holstein Haplotype 3 (HH3)	HH3	HH3F	Free	HH3C	Carrier	Normal	(HH3S)		Embryonic death	X	X
HOL	Holstein Haplotype 4 (HH4)	HH4	HH4F	Free	HH4C	Carrier	Normal	(HH4S)		Embryonic death	X	X
HOL	Holstein Haplotype 5 (HH5)	HH5	HH5F	Free	HH5C	Carrier	Normal	(HH5S)		Embryonic death	X	
HOL	Holstein Haplotype 6 (HH6)	HH6	HH6F	Free	HH6C	Carrier	Normal	(HH6S)		Embryonic death		X
HOL	Holstein Haplotype 7 (HH7)	HH7	HH7F	Free	HH7C	Carrier	Normal	(HH7S)		Embryonic death		X
HOL	Achondrogenesis, Type II (Bulldog)	Bulldog	B3F	Free	B3C	Carrier	Normal	(B3S)		Physical malformation, Stillborn		
HOL	Bovine Lymphocyte Intestinal Retention Defect (BLIRD)	BLIRD	LRF	Free	LRC	Carrier	Normal	LRS	Carrier	Reduced daily gain, increased young stock mortality		X
HOL	Early Onset Muscle Weakness Syndrome	MW	MWF	Free	MWC	Carrier	Normal	MWS	Carrier	Lethal after birth		
HOL	Red factor	Red factor	RDF	Free	RDC	Carrier	Black/white coat colour	RDS	Carrier	Red coat colour	X	X
HOL	Dominant variant red factor	Variant red	VRF	Free	VRC	Carrier	Red coat colour	VRS	Carrier	Red coat colour	X	X
RDC	Spinal dysmyelination (SPAST)	Spinal dysmyelination	SDF	Free	SDC	Carrier	Normal	SDS	Carrier	Lethal after birth	X	X
RDC	Trimethylaminuria (fishy taint)	Trimethylaminuria	FMF	Free	FMC	Carrier	Normal	FMS	Carrier	Tainted taste in milk	X	
RDC	Bovine progressive degenerative myeloencephalopathy (Weaver syndrome)	Weaver syndrom	WEF	Free	WEC	Carrier	Normal	WES	Carrier	Lethal after birth	(X)	
RDC	Spinal muscular atrophy (SMA)	SMA	SMF	Free	SMC	Carrier	Normal	SMS	Carrier	Lethal after birth	X	X
RDC	Arthrogryposis multiplex congenita (AMC)	AMC	A2F	Free	A2C	Carrier	Normal	(A2S)		Physical malformation, stillborn	X	X
RDC	PIRM (AH1)	PIRM (AH1)	PIF	Free	PIC	Carrier	Normal	(PIS)		Embryonic death	X	X
RDC	Ayrshire Haplotype 2 (AH2)	AH2	AH2F	Free	AH2C	Carrier	Normal	(AH2S)		Embryonic death		X
RDC	Brown Swiss Haplotype 1 (BH1)	BH1	BH1F	Free	BH1C	Carrier	Normal	(BH1S)		Embryonic death	X	
RDC	Brown Swiss Haplotype 2 (BH2)	BH2	BH2F	Free	BH2C	Carrier	Normal	(BH2S)		Lethal at/after birth		X
RDC	Bos Taurus Autosome 12 (BTA12)	BTA12	B12F	Free	B12C	Carrier	Normal	(B12S)		Embryonic death		X
RDC	Bos Taurus Autosome 23 (BTA23)	BTA23	B23F	Free	B23C	Carrier	Normal	(B23S)		Abortion in late gestation		X
RDC	Bovine tail stump sperm defect (TSD)	TSD	TSDF	Free	TSDC	Carrier	Normal	TSDS	Carrier	Infertile sperm, only expressed by bulls	X	
RDC	Chondrodysplasia, recessive (Bulldog)	Bulldog	B4F	Free	B4C	Carrier	Normal	B4S	Carrier	Physical malformation, Stillborn		
JER	Recto-vaginal constriction (RVC)	RVC	RVF	Free	RVC	Carrier	Normal	RVS	Carrier	Constriction of the recto-vagina areal		
JER	Jersey Haplotype 1 (JH1)	JH1	JH1F	Free	JH1C	Carrier	Normal	(JH1S)		Embryonic death	X	X
JER	Jersey Haplotype 2 (JH2)	JH2	JH2F	Free	JH2C	Carrier	Normal	(JH2S)		Embryonic death		
JER	Neuropathy with splayed forelimbs	JNS	JNSF	Free	JNSC	Carrier	Normal	JNSS	Carrier	Physical malformation, not lethal		X
ALL	Progressive retinal degeneration (RP1)	RP1	RP1F	Free	RP1C	Carrier	Normal	RP1S	Carrier	Progressive blindness		X
ALL	Polled	Polled	POF	Free	POC	Carrier	Hornless	POS	Carrier	Hornless	X	X
ALL	Beta casein (A1/A1, A1/A2, A2/A2 possible genotypes)	Beta Casein	A2A2		A1A2			A1A1			X	X
ALL	Kappa casein (AA, AB, AE, BB, BE, EE possible genotypes)	Kappa Casein									X	X
ALL	Twin test	Twin test									X	