Frequently asked questions about genomic testing

1. Why do a genomic test?

Genomic testing gives twice as much genetic information on a young animal as pedigree index or parent average. Use genomic testing to identify the best heifers to:

1) retain as replacements

2) mate to sexed semen

3) flush as embryo dams

For males, identify potential AI candidate bulls and give more information on potential stock bulls.

2. What animals should be tested?

Heifers and young bulls are most suitable for genomic testing. These are the animals in the herd with the least known about their genetic merit but also with the highest potential type merit and PLI values.

3. What tests are available?

Holstein UK offers high density (HD) tests for both males and females.

4. How do I collect a DNA sample?

Either by sending in a tissue tag vial or by requesting a hair sample kit from Holstein UK and taking a hair sample with roots from the tail switch, attaching it to the hair card supplied and returning the sample by post.

5. How long does the process take?

6 to 8 weeks depending on what date you return the sample (for accurate dates please see lab dates schedule document on the HUK website).

6. What information do I get back on my animals?

Each animal receives a full set of UK genomic type, production and health trait results including the GPLI index.

7. How do I access the results?

Log in to the genomic portal at https://genomics.nbdc.uk/ for UK and GTPI female results as well and unofficial UK male results.

The genomic portal may also be accessed under the services tab of the Holstein UK website.

Individual female and official male results are published on Holstein UK web factsheet.

8. Is a UK test the same as a US or Canadian test?

No, a UK test (GPLI) is the only one which will give you genetic merit in UK conditions.

US (GTPI) and Canadian (GLPI) results will give information on performance in those countries and are not relevant in UK conditions. Use of these tests should only be considered for international marketing purposes.

9. Are recessives and haplotypes included in the test?

Yes, a number of genetic tests are included in the price of the genomic test: Haplotypes, Dumps, Blad, Citrullinemia, Beta Lactoglobulin, Kappa Casein, Beta Cassein A/B and Leptin.

For an additional charge the member can also request the following tests: Coat Colour, Polled status, Beta Casein A2, Brachyspina, HCD and CVM. If these tests are requested at the same time as the genomic test, then they are offered at a slightly reduced price.

10. What is the difference between the unofficial and official male test?

A male of any age can obtain an unofficial UK genomic result. This is only available to the owner and can be used to sell the bull but is not publishable for semen marketing purposes.

If it is intended that the bull will be marketed through AI, then the result must be made official by payment of the extra fee of £250 to AHDB dairy.

11. What is the difference between a genotype and a genomic test?

The DNA code is read to produce a GENOTYPE.

The genetic merit of this genotype is measured using a GENOMIC test.

(Be aware that the term genotype is also used in parentage testing)

12. Is a genomic test enough to prove parentage?

Only if the parent(s) been verified also have a genomic evaluation.

13. Does a genomic parentage test calf receive a UK genomic evaluation for use in breeding decisions?

Yes, as long as the parentage check is successful.

14. How do I know if a calf is eligible for a genomic parentage check?

When registering the calf, Holstein UK registration software will identify eligible calves for the user.

15. How do I know if the sire and/or dam have a UK genomic evaluation?

A. You can check this using the animal search on Holstein UK website.

16. Can imported embryos undergo a genomic parentage test?

A. Yes if both sire and dam have a genomic evaluation.

17. I didn't get results back? What percentage of tests don't produce a result?

A small number (<5%) of genomic tests do not yield a result. These animals can be resampled. To avoid this, it is important to take a good DNA sample and make sure each sample is properly identified and matches the calf tested correctly.

18. Can a foreign genomic test be used to produce a UK test result?

Yes, but only if the genotype file is available.

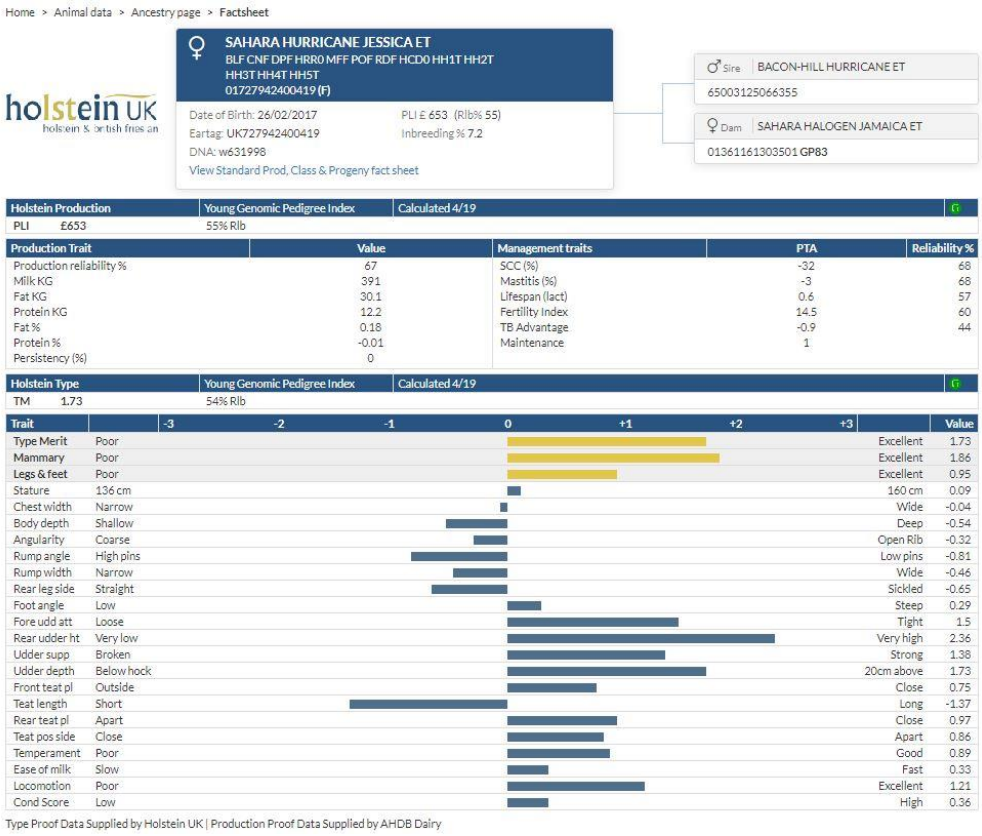
If you import an animal which has been genomic tested abroad and wish to get UK results, make sure you contact the vendor to arrange for the genotype file information to be sent to AHDB Dairy.

19. How can I request a genomic test?

Genomic tests can be requested during the registration process or via the genomic portal at https://genomics.nbdc.uk/.
Discounts are available for bulk forward orders.

If you have any further queries about genomic testing please contact Holstein UK on 01923 695 200 or email info@holstein-uk.org

Example female genomic web factsheet:



Home > Animal data > Ancestry page > **Factsheet**

holstein UK
holstein & british friesian

♀ **SAHARA HURRICANE JESSICA ET**
BLF CNF DPF HRR0 MFF POF RDF HCD0 HH1T HH2T HH3T HH4T HH5T
01727942400419 **(F)**

Date of Birth: 26/02/2017 | PLI £ 653 (Rlb% 55)
Eartag: UK727942400419 | Inbreeding % 7.2
DNA: w631998
View Standard Prod, Class & Progeny fact sheet

♂ Sire | BACON-HILL HURRICANE ET
65003125066355

♀ Dam | SAHARA HALOGEN JAMAICA ET
0136116130350 1 **GP83**

Holstein Production	Young Genomic Pedigree Index	Calculated 4/19	G
PLI £653	55% Rlb		

Production Trait	Value	Management traits	PTA	Reliability %
Production reliability %	67	SCC (%)	-32	68
Milk KG	391	Mastitis (%)	-3	68
Fat KG	30.1	Lifespan (lact)	0.6	57
Protein KG	12.2	Fertility Index	14.5	60
Fat %	0.18	TB Advantage	-0.9	44
Protein %	-0.01	Maintenance	1	
Persistency (%)	0			

Holstein Type	Young Genomic Pedigree Index	Calculated 4/19	G
TM 1.73	54% Rlb		

Trait		-3 -2 -1 0 +1 +2 +3		Value
Type Merit	Poor		Excellent	1.73
Mammary	Poor		Excellent	1.86
Legs & feet	Poor		Excellent	0.95
Stature	136 cm		160 cm	0.09
Chest width	Narrow		Wide	-0.04
Body depth	Shallow		Deep	-0.54
Angularity	Coarse		Open Rib	-0.32
Rump angle	High pins		Low pins	-0.81
Rump width	Narrow		Wide	-0.46
Rear leg side	Straight		Sickled	-0.65
Foot angle	Low		Steep	0.29
Fore udd att	Loose		Tight	1.5
Rear udder ht	Very low		Very high	2.36
Udder supp	Broken		Strong	1.38
Udder depth	Below hock		20cm above	1.73
Front teat pl	Outside		Close	0.75
Teat length	Short		Long	-1.37
Rear teat pl	Apart		Close	0.97
Teat pos side	Close		Apart	0.86
Temperament	Poor		Good	0.89
Ease of milk	Slow		Fast	0.33
Locomotion	Poor		Excellent	1.21
Cond Score	Low		High	0.36

Type Proof Data Supplied by Holstein UK | Production Proof Data Supplied by AHDB Dairy

Document last updated: 25/09/2020 by Dr Darren Todd