

The American Guernsey Association provides genomic and parentage testing for registered Guernsey cattle upon request. All tests require hair follicles. Before requesting DNA testing, please read the following to ensure that you request the correct test.

PARENTAGE TESTING

All registered males are required to be DNA tested for parentage prior to having registered offspring. All ET/IVF donor dams are also required to be DNA tested for parentage prior to having registered ET or IVF offspring. A penalty fee will be invoked for any required animals who are not tested.

The AGA can also test animals with questioned parentage. We request that you give the office as much information as possible about potential parentage in order to make the process efficient.

The AGA currently offers two routes to parentage test males and females. The first is standard DNA processing through Maxam. The second is via a genomic test via Neogen. Genomic parentage testing requires that the calf's sire have been genomic tested. A list of genomic-tested bulls can be acquired by contacting the office.

Price List:

Parentage testing through Maxam.....\$40

Parentage testing via genomics through Neogen....\$45 for low density; \$120 for high density – includes genomic data

GENOMIC TESTING

All genomic testing requires contacting the office with a list of registration numbers and desired tests. Unregistered animals cannot be genomic tested.

1. **Genomic Evaluation Testing** – includes a breakdown for health, production and type traits based on the animal's DNA. Can also be used for parentage testing if the animal's sire has been genomic tested (contact the office for a list of genomic-tested bulls). There are two options for genomic testing:
 - a. **Low Density** – recommended for females or bulls who will not be going into AI.
 - b. **High Density** – a more detailed analysis; recommended for bulls going into AI.
2. **A2 Testing** – testing for the A1 or A2 protein gene. Results are automatically included on official American Guernsey pedigrees and listed in sales catalogs.
3. **BVD Testing** - health test for BVD. Once an animal has tested negative, it does not need tested again. BVD is a required negative for Guernsey Marketing sales. This test is inexpensive and highly recommended.
4. **Polled Testing** - testing for the polled (hornless) gene.

All of these tests can be run from the same hair sample.

Price List:

Low-density genomic evaluation.....\$45

High-density genomic evaluation....\$120

A2 Testing.....\$12

BVD Testing.....\$3.50

Polled Testing.....\$40