

A2 Genotyping Assay

Beta-casein makes up 30 percent of milk protein and comes in two forms; A1 and A2 beta-casein. The difference between A1 and A2 beta-casein is determined by the genetics of the animal.

Reports indicate that A2 beta-casein proteins are potentially more favorable to digest due to the change in protein structure. Studies have linked possible health benefits to A2 milk consumption. While health benefits are still being debated, milk containing the A2 protein is selling in the USA and other markets at a premium over standard milk.



Test purpose

- Identifies the A1 and A2 beta-casein status of individual animals.
- Provides insight for strategic breeding to develop A2 herd status.

Use on

- Dairy calves, heifers and cows.

Sample types

	Accuracy	Price
Tissue (ear notch)	99%	\$12
Whole Blood (purple top tube)	99%	\$12
Milk (fresh, frozen, preserved, hand-stripped)	94%	\$12

Results

- Within 10 days of receipt of sample.
- Reported as A1/A1, A1/A2, A2/A2 or retest.
- Retest reported in the event of a contaminated or poor quality milk sample.

Begin testing

- Order sample collection supplies at mycentralstar.com or call 800.631.3510.
- Collect samples and send with submission form to:

CentralStar Wisconsin Lab, 200 East Kelso Road
Kaukauna, WI 54130

CentralStar Michigan Lab, 1163 Comet Lane - Suite 100
Grand Ledge, MI 48837

Testing strategies:

Herd-wide testing helps drive genetic progress for A2 breeding and milk production. The rate of converting a herd to A2 status depends on the course of action. Many testing strategies exist and begin with testing all animals.

- Test all females. Keep only those verified as A2/A2 and sell the rest. Select homozygous A2/A2 sires for all future matings. To expedite progress, use female-sorted homozygous A2/A2 sires for all breedings. This is the fastest approach to achieve A2 herd status..
- Test all females. Sell animals verified as A1/A1. Select homozygous A2/A2 sires for matings on all other animals. Using female-sorted homozygous A2/A2 sires will expedite progress. Animals verified as A2/A2, bred to A2/A2 homozygous sires will produce only A2/A2 offspring. Animals verified as A1/A2 bred to homozygous A2/A2 sires will produce A2/A2 offspring 50 percent of the time.