UC Davis School of Veterinary Medicine

A2(Beta Casein) Genotyping

**Introduction**

The solids found in cow’s milk are composed of fat, protein, lactose and minerals. Beta-casein is one of six milk proteins and is produced by the CSN2 gene. Twelve genetic variants of CSN2 are known which cause changes of certain amino acids in the beta-casein protein and alter its properties. These variants can be classified into 2 groups (A1 and A2) which code for different amino acids at one specific site in the gene. Milk containing A2 beta casein is considered to have health benefits.

The VGL is certified by the A2 Corporation Ltd to offer a DNA test to identify animals that carry the A2 beta casein variant.  Test results are critical to implement breeding programs for production of A2 homozygous animals.

[**ORDER TEST**](https://www.vgl.ucdavis.edu/myvgl/menuforward.html?meth=frwdTwo&item=cattletests)| [**PRICE LIST**](https://www.vgl.ucdavis.edu/services/cattle.php)  
**Allow 2-6 business days for results.**

**Results reported as:**

A2/A2- 2 copies of A2 present. If bred to other A2/A2 animals, only A2/A2 offspring will be produced.

A1/A2- 1 copy of A2 present. If bred to A2/A2 animals, 50% of offspring will be A2/A2.

A1/A1- No copies of A2 present.

**For more information about A2 Corporation and A2 Milk®, visit the**[**A2 Corporation Website**](http://www.a2corporation.com/)

As a licensed laboratory, VGL is required to send A2 Corporation Limited a copy of all A2 Gene Tests and to disclose the following:

*VGL is an A2 Corporation Limited (A2C) accredited and registered A2 Gene Tester. A2 Gene Tests conform to the specification and are validated to the standards of A2C.*

*A2C will only access  information relating to you and your animals from testing carried out by the VGL for the purpose of contacting you about potential milk supply and to maintain a register of A2 gene tested animals.*

*A2C owns various intellectual property rights (including patent rights, trade marks, and technical and commercial know how) relating to the commercial production and sale of  a2™ branded milk or milk with reduced beta casein A1.*

*It is possible that commercial use of test results may fall within the scope of such intellectual property rights, so if you intend to form a herd of animals used to produce a2™ branded milk or milk with reduced beta casein A1 on a commercial scale, you should contact A2C for more information.*

**References:**

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