

A *new* AGE IN DNA-MARKER TECHNOLOGY

What are GeneSTAR MVPs

Now GeneSTAR® from Pfizer Animal Genetics provides a new 56 DNA-marker panel that delivers more genetic information on core traits with greater reliability. GeneSTAR MVPs™—or Molecular Value Predictions—measure the molecular breeding values for the traits of feed efficiency, marbling and tenderness. This new panel, *authenticated through an independent validation process*, will enhance genetic improvement by providing more reliable information to enable greater selection opportunities.

GeneSTAR MVPs incorporate the 12 DNA markers included in the previous GeneSTAR test along with information from an additional 44 DNA markers to form the new 56 DNA-marker panel. MVPs are reported in units of the trait as a prediction of the animal's genetic value.

Trait	Definition	Units	MVP Range*	Average % Reliability**
Feed Efficiency	Difference between an animal's actual and expected feed intake based on its body weight and growth rate	kgs/day	Min: -1.44 Max: 1.08	30%
Marbling ¹	Degree of intramuscular fatness in the <i>longissimus dorsi</i> (ribeye) muscle	AUS-MEAT Marble Score 0–9	Min: -1.00 Max: 1.11	26%
Tenderness	Force required to shear a cooked steak after postmortem aging	W-B Shear Force (kgs)	Min: -0.47 Max: 0.86	49%

*The closer the MVP value is to the highlighted Minimum or Maximum in each row, the more favourable the result.

**The reliability value is expressed as a percentage of the maximum accuracy attainable.

How to use GeneSTAR MVPs

The new GeneSTAR MVP reporting system provides information on the animal and its genotype that can be used to make breeding and management decisions. Reading the MVP data, the animal in the example below has a GeneSTAR MVP feed efficiency value of -0.33 kgs and a % rank value of 26 percent. This means that the MVP value for this animal ranks in the top 26 percent of animals within the same breed.

As a full-service genomics provider, Pfizer Animal Genetics offers a team of professionals to help customers achieve maximum value from the application of test results in production-marketing systems. This includes helping you understand test information and apply results to your own management and marketing programmes.

Molecular Value Prediction

	FE	Marb	Tend
MVP	-0.33	0.01	-0.42
% Rank	26%	49%	7%

A sample GeneSTAR MVP report with individual percentile rank is shown at left. In addition, overall herd and breed ranges for MVPs and trait accuracies are listed in the report.

For specific questions regarding animals that may have been recently tested, or any other enquiries relating to the new GeneSTAR system, contact Pfizer Animal Genetics on 1300 768 400 or visit our Web site, www.pfizeranimalgenetics.com.au.



¹ The marbling MVP is significantly associated with Ultrasound as % IMF at 60 days prior to harvest.