
Genomic-enhanced EPDs, Powered by HD 50K Frequently Asked Questions

Q: What does a partnership between the Angus Genetics Inc. (AGI) and Pfizer Animal Genetics mean for Angus breeders?

A: Angus Genetics, Inc. (AGI), a wholly owned subsidiary of the American Angus Association (AAA) and Pfizer Animal Genetics are pleased to announce a partnership, which means that AGI is the exclusive distributor of HD 50K for Angus tests for customers in the United States. Once fully implemented, this agreement will give breeders access to genomic-enhanced expected progeny differences (GE-EPDs) powered by the High Density 50K (HD 50K) platform.

Q: What information will breeders receive after testing with HD 50K and after it is integrated into the Angus Genetic Evaluation?

A: There is still work to be done to incorporate HD 50K genomic predictions into the American Angus National Cattle Evaluation. Initially, percentile rankings associated with the HD 50K derived genomic breeding values for each trait will be reported. Once all systems are up and running, results also will be reported in the form of GE-EPDs and associated accuracies. The HD 50K percentile ranks are derived from genomic breeding values benchmarked against the database of HD 50K-tested Angus cattle from Pfizer Animal Genetics, and will be reported to the nearest 1 percent. Lower percentile rank values generally indicate preferred ranking and more favorable genetic merit.

Q: Where should breeders submit DNA samples for testing?

A: The exact date is still yet to be determined; however, effective Dec. 1, 2010, samples for HD 50K for Angus must be submitted exclusively to AGI. AGI will forward samples to Pfizer Animal Genetics for genotyping and calculation of genomic predictions. Then, results will be returned to AGI for processing and distribution to members. Until AGI begins accepting samples, producers can continue to send them directly to Pfizer Animal Genetics, and results will be returned as they have always been.

Q: Will previous HD 50K customers be required to resubmit samples to AGI?

A: No, customers who have previously tested animals using HD 50K, or those who submit samples to Pfizer Animal Genetics prior to the date when AGI begins accepting samples, will not be required to send new samples or previous results to AGI. Such customers will be contacted by Pfizer Animal Genetics to facilitate authorization for historic results to be forwarded to AGI for inclusion in the Angus National Cattle Evaluation at no additional charge. To prevent selective reporting, authorization for release of results to AGI will be on a job basis. Responses must be received prior to Dec. 30, 2010 to be eligible for this one-time offer.



Q: What is HD 50K for Angus?

A: High-Density 50K, or HD 50K, is the beef industry's first and only high-density DNA panel where more than 50,000 DNA markers are genotyped for each animal. This powerful tool can help producers more dependably predict genetic merit in young, unproven Angus cattle, as compared to non-parent EPDs. This information saves time and money by providing more complete and accurate information for more precise selection and mating decisions about young animals.

Q: How can genomic-enhanced EPDs powered by HD 50K help producers make better decisions?

A: HD 50K helps to identify sire prospects more dependably that should be used extensively, strategically or sparingly, based on predictions of genetic merit across a broad range of economically important traits. When applied to young replacement females and cows, HD 50K delivers predictions of genetic merit with reliabilities equivalent to nearly a lifetime of natural calf production. This can help producers identify genetic strengths and weaknesses of females early in life, helping to ensure their genetic merit may be exploited more fully through a lifetime of more strategic and profitable mating decisions.

Q: How were HD 50K genomic predictions developed?

A: The HD 50K predictions were developed from the evaluation of more than 5,000 genotyped Angus animals with phenotypes and genetic predictions available for applicable traits. Among other initiatives to help document the efficacy of HD 50K predictions, high-accuracy Angus artificial insemination (AI) sires were used to assess the reliability of the predictions.

Q: Where should producers go for more information?

A: Producers should contact their Pfizer Animal Genetics or AAA representative, or call 877-BEEF DNA. A variety of educational and technical information about HD 50K for Angus is available on the Pfizer Animal Genetics website, www.pfizeranimalgenetics.com. Additional information will be available about GE-EPDs powered by HD 50K in the coming months.

