



Igenity[®] Profile for Angus Goes HD

Producers get higher-accuracy result at no additional cost.

Angus Genetics Inc. (AGI) announces the introduction of the first genomic-enhanced expected progeny differences (GE-EPDs) derived from a high-density whole genome scan (HD WGS) with 50,000 markers. This milestone in genetic advancement is a direct result of the collaboration between AGI, a subsidiary of the American Angus Association; the University of Missouri; Iowa State University; and Igenity,[®] a division of Merial.

The high-accuracy GE-EPDs are powered by the new high-accuracy Igenity Profile for Angus that includes 14 economically important traits. Today, the high-accuracy Igenity Profile for Angus is the only genomic test available that provides GE-EPDs for young animals resulting in significantly improved accuracies for Angus EPDs. The price of the Angus-specific profile through AGI remains \$65.

“This is the industry’s only DNA profile used by AGI and the American Angus Association in the formulation of GE-EPDs,” Bill Bowman, AGI president, says. “We are excited about this development because it will continue to give Angus breeders and Igenity customers a significant advantage in the marketplace today.”

Last summer, AGI and Igenity entered into an agreement to provide Association members with GE-EPDs. The partnership marks the first time in the industry’s history that beef producers have access to GE-EPDs for multiple traits at once — and all derived

from a breed-specific Angus profile. The introduction of the higher-density panel is the partnership’s most recent — and perhaps most innovative — development for the industry.

“Our partnership with Igenity will continue to greatly benefit Angus producers of all herd sizes. Producers can be confident the high-accuracy Igenity profile will help to improve their selection decisions, to indicate the genetic merit of their animals, and to increase the accuracy of EPDs,” Bowman says. “Through AGI and Igenity’s common vision to provide the most advanced solutions to beef producers’ genetic selection and management needs, we will continue to bring advancements like the high-accuracy Igenity profile to the marketplace.”

Igenity’s research and development team worked with Jerry Taylor at the University of Missouri and Dorian Garrick at Iowa State University “to identify and combine the most powerful candidate gene markers and HD WGS 50,000 markers to create the most comprehensive and cost-effective product for Angus cattle on the market,” says Stewart Bauck, executive director of research and development for Igenity. “The high-accuracy Igenity Profile for Angus was developed specifically for Angus cattle, which makes it more predictive of Angus performance than a product developed across several breeds.

“The high-accuracy Igenity profile for Angus has been thoroughly researched and third-party-validated, which — together with its incorporation into genetic evaluation — makes it one of the most important advances in beef cattle breeding in the marketplace today,” Bauck says.

The product’s initial results caused high interest in both the academic community and the beef industry when presented at the 2009 Beef Improvement Federation (BIF) annual convention. “The entire industry has been waiting for this breakthrough,” Taylor says.

“One of the benefits of GE-EPDs derived from the HD WGS and causal gene markers is the dramatic increase in accuracy, which helps take the risk out of selection decisions for both commercial cow-calf and seedstock producers,” Taylor says. “Further, the GE-EPDs are easy to use because they combine the high-accuracy Igenity profile

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results with traditional American Angus Association EPDs that producers are familiar with using. “The increase in accuracy from incorporating the high-accuracy Igenity Profile for Angus is equivalent to adding about 16 progeny to a weanling bull’s marbling EPD.¹ For young bulls with ultrasound, incorporating the Igenity profile is comparable to adding an additional 12 progeny on top of ultrasound data,” Taylor

says. “This can dramatically shorten generation intervals, allowing producers using Angus seedstock to make faster genetic progress.”

“Less risk and faster genetic progress — the high-accuracy Igenity profile is an incredible value for beef producers,” Taylor says.

Through the comprehensive DNA offering from Igenity, Angus producers can receive analyses on 14 economically important traits, including the most comprehensive list of GE-EPDs (see Table 1), plus the option to test for coat color, neuropathic hydrocephalus (NH) and arthrogryposis multiplex (AM) in the same sample.

For more information about Igenity, contact your Igenity sales representative, call 877-443-6489 or visit www.igenity.com/beef. For more information about high-accuracy, genomic-enhanced EPDs available from the American Angus Association, contact your Angus regional manager or call 816-383-5100.



Editor’s Note: This release was provided by the American Angus Association and Igenity.

Table 1: Traits analyzed via the Igenity Profile for Angus

- ▶ marbling
- ▶ ribeye area
- ▶ fat thickness
- ▶ carcass weight
- ▶ tenderness
- ▶ percent choice (quality grade)
- ▶ yield grade
- ▶ heifer pregnancy
- ▶ stayability (longevity)
- ▶ maternal calving ease
- ▶ docility
- ▶ average daily gain
- ▶ feed efficiency
- ▶ yearling weight

¹Van Eenennaam A. Marker Assisted Selection. Fact sheet. 2009