



## Genetics / Molecular Biology

### → Challenge

A Chicago-based law firm asked PharmaForensics Laboratories to assist in an infringement case involving their client's genetically modified agricultural product. Discovery would expire in about two weeks. They asked us to assess the presence or absence of a specific transgene in two types of agricultural products; each included approximately 15-20 different "lines."

### ↳ Solution

We used DNA sequence analysis to evaluate the presence of the foreign gene. To generate enough material, we extracted the DNA from the samples, then used custom-designed primers to amplify the gene. We purified the gene and submitted the DNA and primers to our preferred DNA sequencing center for analysis. Within 24 hours, we had raw sequence data. We then compared the sequences to determine if the exact transgene sequence was embedded into the genome of the agricultural products.

We also experimented to determine if the embedded transgene was transcribed within the agricultural samples. We isolated RNA from the samples and converted it to complementary DNA (cDNA) to assess gene expression. The transgene was amplified, purified, and submitted to our sequencing provider for analysis. We then independently analyzed the raw sequencing results to determine if the transgene was actively transcribed in the agricultural sample products.

### ↗ Results

We submitted a detailed report to the lead attorney that described the methods and results of the DNA analyses. This report was included as a supplement in the report of the client's expert witness and used as evidence at trial to prove infringement. Prior to trial, our client attorney remarked how well written and comprehensive the report was. He was grateful that we were able to produce high-quality results within the short time frame.

Communication and responsiveness are critical aspects of our litigation support services—not only throughout the project, but also in the written deliverables at the project's conclusion. •

### ☎ Talk to PharmaForensics Laboratories

PharmaForensics Laboratories delivers winning results.

Email us at [info@pharmaforensicslabs.com](mailto:info@pharmaforensicslabs.com) or call **734-996-7343** to learn how we can assist with your infringement matter.