

# NON-GMO QUESTIONS ANSWERED

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## What options are available for verifying my products as Non-GMO?

Verifying products as Non-GMO is a rigorous process that involves the supplier complying with traceability, segregation, labeling, and testing best practices that is best suited for their production lines. Suppliers have various options and decisions to make when considering a Non-GMO verification strategy such as choosing a Non-GMO standard to comply with, a technical administrator to oversee the verification auditing process, and an approved ISO-17025 accredited laboratory to perform the testing. Eurofins GeneScan conveniently offers all of these options.

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## I have heard that testing of final products is an unreliable measure of Non-GMO product integrity. Is this true and when does it make sense to test my products?

Different production lines may require different testing regimens based on the product types and production environments. In some cases, the final product testing provides valuable data points that are used in a comprehensive Non-GMO assurance program and even utilized as a valuable hold and release point prior to commercialization. It is very important to consult with a Non-GMO verification expert that can advise on the appropriate points in the supply chain to test and on a recommended frequency. A Eurofins GMO testing expert will work closely with a customer to work out a testing strategy that is suitable for the company's needs.

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## What types of tests are available for Non-GMO verification and what is the appropriate use of each test?

There are 3 primary test methods available for Non-GMO verification: the PCR (polymerase chain reaction) test, ELISA (Enzyme Linked Immunosorbent Assay) method, and Lateral Flow Strips. PCR, which is DNA-based, is the most sensitive and robust method for detecting a wide gamut of GMOs, both qualitatively and quantitatively, in a wide range of product types. ELISA is a protein-based method that provides a reliable measure of GMO content, but is most suitable for raw or slightly processed samples. Lateral Flow Strips provide rapid screening capabilities for crude products in the field. Each method has advantages and disadvantages, and appropriate usage will depend on the product type and appropriate sampling plan.

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## When sending samples to a testing lab, what factors should I consider when selecting a reliable laboratory?

When selecting a laboratory for Non-GMO verification, a supplier wants to choose a lab that is accredited to the general requirements of ISO/IEC 17025:2005 standard. Adherence to this rigorous standard validates that the lab is competent to perform various tests and calibrations where testing and calibration form part of inspection and product certification. Eurofins GeneScan's GMO testing capabilities are included in its ISO/IEC 17025: 2005 accredited scope and is one of the first GMO testing laboratories to hold this accreditation for GMO testing in the US. In addition, Eurofins GeneScan is an approved laboratory for the Non-GMO Project.

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## I would like to label my products as "GMO-Free" but I have heard that this terminology is not correct? What type of label works best for my products?

In today's food and feed industry, making a claim that a product "GMO Free" is not legally or scientifically secure and implies that there is 0% GMO content in a product. Most GMO labeling legislation is based on the supplier's ability to control the adventitious presence of GMOs in a production line below a certain threshold. Doing so allows that supplier to make a claim that the products in question are Non-GMO, not GMO Free. A supplier should use a Non-GMO verification scheme and label, as this standard ensures to the end user the validity of the products composition and transparency of the verification process itself.

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## Why should I get my product Non-GMO verified?

If you are planning to enter the growing Non-GMO market, a supplier that has a product line that is verified and audited to a suitable verification standard provides the best possible assurance to their customers that their products' Non-GMO integrity and claims can be trusted. In addition, achieving verification status with Eurofins GeneScan ensures that you have a partner that can provide ongoing support in a changing market.

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## What is the difference between Non-GMO testing and Non-GMO verification? Do I need both?

Non-GMO verification refers to the comprehensive process evaluation conducted by an auditing firm where a supplier needs to meet the standard criterion for traceability, segregation, risk assessment, testing, and quality control management for a successful Non-GMO verification status. Non-GMO testing is an essential facet of most Non-GMO verification programs and refers to the actual testing regimen needed for analytical evaluating products for the presence of GMOs. Both verification and testing are complementary processes, and Eurofins GeneScan's experts can consult on the best approach for any supply chain.

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## What is the Non-GMO verification process and how long will it take to get verified?

Verifying products as Non-GMO is a rigorous process that involves the supplier complying with traceability and labeling of their products on parameters such as GMO content, allergens, country of origin, residues, etc. The time frame for verification can range from one month to six months depending upon whether there are high or low risk inputs in the product. The time frame for verification can range from one month to six months depending upon whether there are high or low risk inputs in the production line. Eurofins GeneScan's experts will work closely with a customer to help meet any time constraints.

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## When and where can I use the Eurofins Non-GMO Verified seal?

For successfully audited companies according to the Eurofins GeneScan Non-GMO verification program, the Eurofins Non-GMO Verified seal is distributed to those companies for their use on various promotional collateral and product labels.



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## To date, there has not been a labeling threshold established by the US government for domestic Non-GMO product labeling. Are there any labeling regulations in place and what guidance is available so that I can start my Non-GMO program today?

Currently, there are no federal mandates on domestic Non-GMO product labeling. However, there are various laws regarding GMO labels dependent upon which state you reside and very well-established GMO labeling legislation for international markets in the EU and Asia. Eurofins GeneScan offers 15+ years of experience and ready-made auditing solutions for your custom programs and for any Non-GMO market your company wishes to penetrate. We also provide consultancy for clients who choose to launch their own programs from the ground up.

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## What is the best way to sample for Non-GMO Verification and what impact does my sampling plan have on results and compliance?

While having the best test methods and a good laboratory to execute your testing program is essential, a proper sampling plan is extremely crucial for success. Not garnering truly representative samples throughout your production line can give you misleading data points regarding the Non-GMO integrity of your products. Our Eurofins GMO experts will work with you to determine the best sampling plan for results and compliance.

For More Information:  
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