

**ACCURACY
THROUGH
INNOVATION**



**PROGNOSIS
BIOTECH**

PRODUCT CATALOG

R&D, IN VITRO DIAGNOSTICS FOR FOOD SAFETY



THE PROGNOSIS BIOTECH STATEMENT: ACCURACY THROUGH INNOVATION



The word 'prognosis' comes from the Greek 'prognostikos' (knowledge beforehand). It combines 'pro' (before) and 'gnosis' (knowledge). Hippocrates used the word prognosis, much as we do today, to mean a foretelling of the course of a disease.

PROGNOSIS BIOTECH SA

is an innovative biotechnology company, specialized in developing and manufacturing modern in-vitro testing technologies for use in the food, beverage, agriculture and clinical diagnostics markets.

Based in Greece, ProGnosis Biotech is an export-oriented enterprise which through a large network of distributors, exports ELISA kits and Lateral-flow tests to more than 40 countries worldwide. In a market where the competition is highly sophisticated and within a continuous challenging environment, Prognosis Biotech has achieved to possess an important role in the food diagnostics industry by providing innovation solutions. The company is always devoted in continuous improvement as it invests in R&D more than 15% of the earnings of each fiscal year.

ACCURACY THROUGH INNOVATION

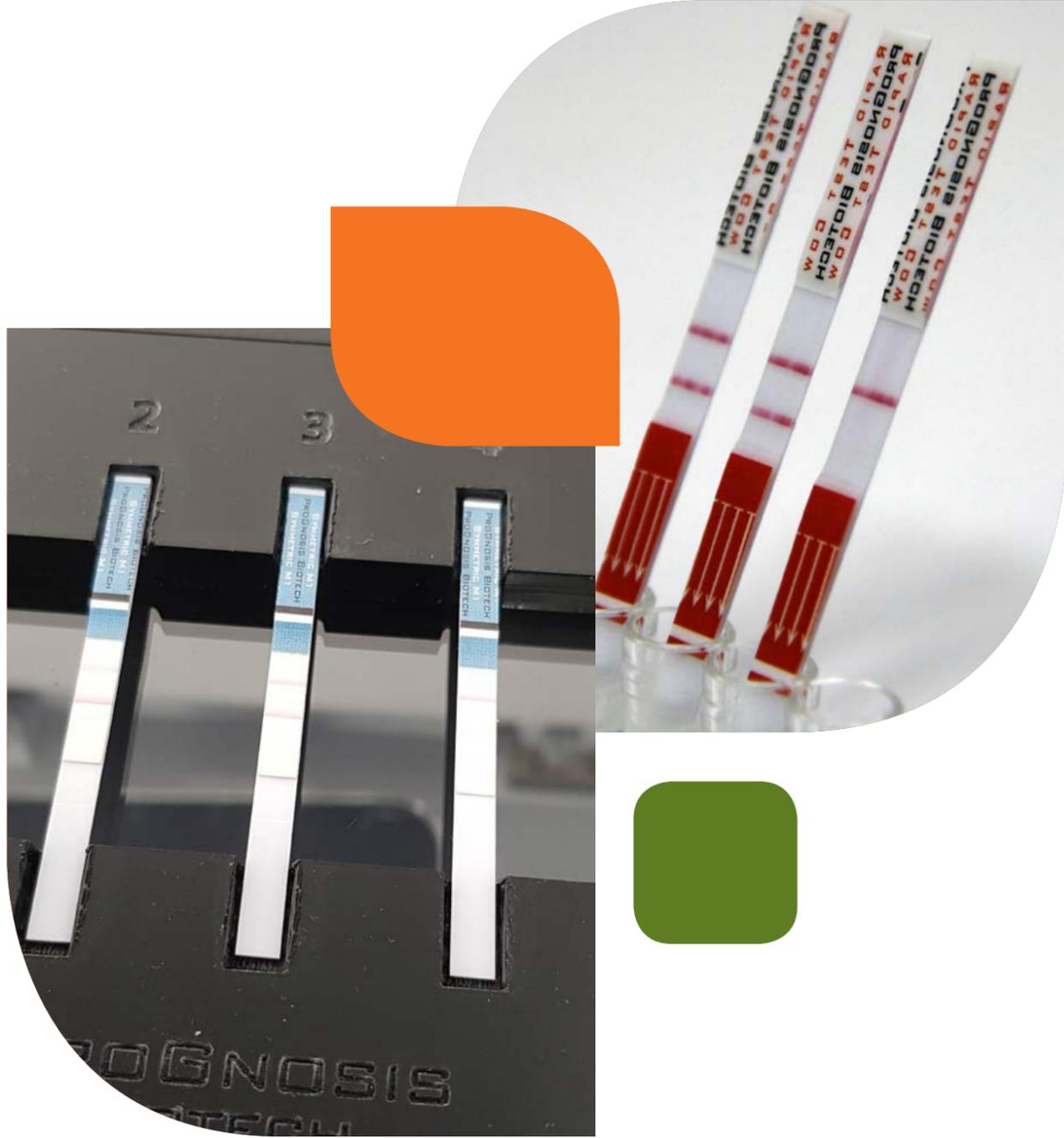
Food quality labs are quite different than biochemistry and R&D labs. There is a severe workload which prohibits the users from identifying the various sources of error as well as a constant demand for decisive results in the minimum amount of time. ProGnosis Biotech is devoted in producing immunological tests that are easy to use, reliable and accurate. Accuracy is achieved by a certain design of product steps, by total quality management and technological innovation.

PROGNOSIS BIOTECH SA IS COMMITTED TO HIGH QUALITY STANDARDS

Total Quality Management affects all company's processes and has been developed to fulfill internal quality standards as well as customer needs. Quality for ProGnosis Biotech means exceeding every individual user's expectations.

As far as the product quality is concerned, ProGnosis Biotech SA adheres to the rules of Good Manufacture Practices (GMP) and the International Organization for Standardization (ISO), while being certified with ISO 9001:2015 in Development, Manufacturing and Marketing of Diagnostic and Laboratory Products. Moreover, all our methods are fully harmonized with European and global standards.

ProGnosis Biotech develops innovative products, as demonstrated by the validations received from external institutes (ILVO validation). In order to consistently provide top-quality products, ProGnosis participates on a monthly basis in Proficiency Tests organized by Fapas (UK), Trilogy (US) and BIPEA (France).



LATERAL FLOW





SYMMETRIC

LATERAL FLOW | MYCOTOXINS

SYMMETRIC TECHNOLOGY

TRANSFORMS A SCREENING TOOL INTO A CONFIRMATORY METHOD

Designed and manufactured in Europe, Symmetric Technology is an outcome of an intensive 4-year R&D investment. Symmetric products are extremely accurate and precise producing also very high results in terms of sensitivity and stability.

First applied on Mycotoxins, Symmetric Technology signifies the transition of Lateral-flow sticks from being a low-esteemed screening tool into a reliable confirmatory method.

To this day, Lateral-flow tests demonstrate CVs of 20-40%, which are considerably higher than the equivalent ones of ELISA and HPLC.



SYMMETRIC M1 RECEIVED THE ILVO VALIDATION, CONFIRMING ITS HIGH ACCURACY



Product Name	Product Code	LOQ	Calibration Range	Duration
Symmetric M1	S2148/96	8 ppt	8-150 ppt	10 min
Symmetric M1 1000	S2448/96	70 ppt	70 -1000 ppt	3 min



SYMMETRIC EXTRA SENSITIVE | METHANOL EXTRACTION

designed to quantify Mycotoxins at very low concentrations in grains, cereals and nuts

Product Name	Product Code	LOQ	Calibration Range	Max Range*	Duration
Symmetric B1 ES	S3124/48	0.70 ppb	0.70 - 20 ppb	up to 100 ppb	10 min
Symmetric Total ES	S3224/48	0.35 ppb	0.35 -10 ppb	up to 50 ppb	10 min

*When extra dilution is applied



SYMMETRIC GREEN SERIES

ONE GREEN EXTRACTION

Symmetric Green is a highly innovative Lateral Flow test series, utilizing state-of-the-art features for the quantitative detection of all the major Mycotoxins (Aflatoxins B1, B2, G1, G2, Deoxynivalenol, Zearalenone, Ochratoxin, Fumonisin, T-2/HT-2) in grains, nuts, cereals and other commodities including animal feed.

SYMMETRIC GREEN SERIES UTILIZES AN AQUEOUS BUFFER FOR THE EXTRACTION STEP, WHILE IT PROVIDES A UNIQUE ADVANTAGE TO THE USERS AS THE SAME EXTRACTION CAN BE USED FOR ALL MYCOTOXINS.

The aqueous extraction method eliminates the adverse effects of organic solvents (such as methanol) on humans, avoiding their unnecessary use in the laboratory.

Hazards caused by organic solvents are generally underrated, nevertheless they are quite serious especially when the individual is exposed to organic solvents on a regular basis.

Organic solvents such as methanol are skin irritants after coming in contact with the skin, while in prolonged exposure they can affect the function of the central nervous system.

Aqueous Extraction

Product Name	Product Code	LOQ	Calibration Range	Max Range*	Duration
Symmetric B1 Green	S3724/48	2 ppb	2-40 ppb	2-200 ppb	5 min
Symmetric Total Green 0-30	S3424/48	1.2 ppb	1.2-30 ppb	1.2-150 ppb	5 min
Symmetric DON Green	S4024/48	150 ppb	150-5000 ppb	up to 25 ppb	5 min
Symmetric Ochratoxin Green	S6024/48	1.5 ppb	1.5-30 ppb	1.5-150 ppb	5 min
Symmetric ZON Green	S5024/48	35 ppb	35-800 ppb	60-4000 ppb	5 min
Symmetric Fumonisin Green	S7024/48	70 ppb	70-3000 ppb	up to 1500 ppb	5 min
Symmetric T-2/HT-2 Green	S8024/48	30 ppb	30-750 ppb	30-3750 ppb	5 min

Product Name	Product Code	LOQ	Calibration Range	Max Range*	Duration
Symmetric Ochratoxin Wine	S6224/48	0.35 ppb	3.35 - 5 ppb	up to 25 ppb	5 min

*When extra dilution is applied





RAPID TEST

LATERAL FLOW | MILK ADULTERATION



THE ONLY QUANTITATIVE
LATERAL FLOW TEST FOR MILK ADULTERATION

RAPID TESTS CAN QUANTIFY FROM NEGATIVE
TO >2% ADULTERATION, IN JUST 3 MINUTES



Product Name	Product Code	LOD	Calibration Range	Duration
Rapid Test Cow (Quantitative)	Q1230/120	0.1 %	0.1-2 %	3 min
Rapid Test Cow (Qualitative)	R1230/120	0.1 %	-	3 min
Rapid Test Goat (Quantitative)	Q1130/Q120	0.1 %	0.1-2 %	3 min
Rapid Test Cow (Qualitative)	R1130/120	0.1 %	-	3 min

RAPID TEST COW
RAPID TEST GOAT

NO FALSE POSITIVE-NEGATIVE RESULTS
ONLY 3 MINUTES
SUITABLE FOR TESTING IN THE FIELD & IN THE LABORATORY
SHELF LIFE: 12 MONTHS | STORAGE 15-25 °C



ELISA MYCOTOXINS

AFLATOXIN M1

Aflatoxins are toxic metabolites of major concern to the dairy industry, generally produced by *Aspergillus flavus*, *A. parasiticus* and *A. nomius*. They can have immunosuppressive, mutagenic, teratogenic and carcinogenic effects. Aflatoxins that are ingested by animals in contaminated pellets and forage are biotransformed at the hepatic level into Aflatoxin M1 (AFM1). Aflatoxin is then excreted in this form into the milk used for human consumption and, it is also present in dairy products. AFM1 in milk and milk products is considered to pose certain hygienic risks for human health and as a result there is an established EU limit of 0,05 µg/kg (50ppt) and 0.025 µg/kg (25ppt) for infant food.



Product Name	Product Code	LOQ	Calibration Range	Duration
Bio-Shield M1 ES	B2048/96/192	5 ppt	5-250 ppt	75 min
Bio-Shield M1 BF (Baby Food)	B3048/96	5 ppt	5-80 ppt	75 min
Bio-Shield M1 Fast	B2548/96	10 ppt	10-250 ppt	30 min
Bio-Shield M1 Milk & Yogurt	B2248/96	100 ppt	100-1000 ppt	20 min

BIO-SHIELD M1 ES RECEIVED THE ILVO VALIDATION,
CONFIRMING ITS HIGH ACCURACY



MYCOTOXINS

Mycotoxins are poisonous chemical compounds produced by certain fungi. There are many such compounds, but only a few of them are regularly found in food and animal feedstuffs such as grains and seeds. Nevertheless, those that do occur in food have great significance in the health of humans and livestock. The effects of some food-borne mycotoxins are acute, symptoms of severe illness appearing very quickly. Other mycotoxins occurring in food have longer term chronic or cumulative effects on health, including the induction of several types of cancers and immune deficiency.

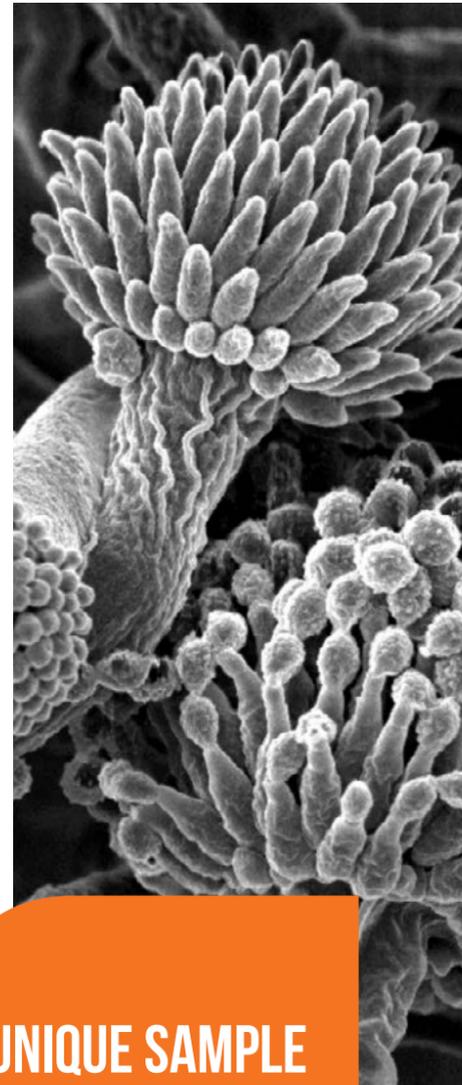
There are six mycotoxins, or groups of mycotoxins, that can be found quite often in food or feed: Deoxynivalenol, Zearalenone; Ochratoxin, Fumonisin, T2-HT2 toxins and Aflatoxins B1, B2, G1, G2.

The fungi that produce mycotoxins in food are categorized into two groups: those that invade before harvest, commonly called field fungi, and those that occur only after harvest, called storage fungi.

There are three types of toxicogenic field fungi:

- plant pathogens such as *F. graminearum* (deoxynivalenol, nivalenol)
- fungi that grow on senescent or stressed plants, such as *F. moniliforme* (fumonisin) and sometimes *A. flavus* (aflatoxin)
- fungi that initially colonise the plant before harvest and predispose the commodity to mycotoxin contamination after harvest, such as *P. verrucosum* (ochratoxin) and *A. flavus* (aflatoxin)

Most controlling government agencies worldwide have regulations regarding the amount of mycotoxins allowable in feed and food and especially in infant food. Accurate and rapid determination of the presence of mycotoxins in commodities is of paramount importance.



UNIQUE SAMPLE PREPARATION

BROAD RANGE OF VALIDATED MATRICES

LOWEST LOD AND LOQ IN THE MARKET



Product Name	Product Code	LOQ	Calibration Range	Max Range	Duration
Bio-Shield B1 5	B5048/96	2 ppb	2-50 ppb	up to 50 ppb	5 min
Bio-Shield B1 OP	B3348/96	2.5 ppb	5-50 ppb	up to 250 ppb	20 min
Bio-Shield B1 ES	B2948/96	0.5 ppb	0.1-10 ppb	up to 50 ppb	20 min
Bio-Shield B1 BF	B3148/96	0.06 ppb	0.1-2.5 ppb	up to 12.5 ppb	75 min
Bio-Shield Total 5	B5148/96	2.5 ppb	2.5-50 ppb	up to 250 ppb	5 min
Bio-Shield Total ES	B2348/96	0.6 ppb	0.6-10 ppb	up to 50 ppb	20 min
Bio-Shield Total OP	B3948/96	3 ppb	5-50 ppb	up to 250 ppb	20 min
Bio-Shield Ochratoxin 8	B5448/96	2 ppb	2-40 ppb	up to 200 ppb	8 min
Bio-Shield Ochratoxin	B2448/96	1.5 ppb	1.5-40ppb	up to 200 ppb	20 min
Bio-Shield ZON 5	B5348/96	15 ppb	25-500 ppb	up to 2500 ppb	5 min
Bio-Shield DON 5	B5248/96	100 ppb	100-5000 ppb	up to 2500 ppb	5 min
Bio-Shield DON	B2648/96	100 ppb	100-5000 ppb	up to 2500 ppb	20 min
Bio-Shield Fumonisin 5	B5548/96	200 ppb	200-5000 ppb	up tp 25000 ppb	5 min
Bio-Shield Fumonisin	B2848/96	120 ppb	120-6000 ppb	up to 3000 ppb	15 min
Bio-Shield T-2/HT-2 8	B5648/96	20 ppb	20-500 ppb	up to 2500 ppb	8 min
Bio-Shield T2	B4148/96	6 ppb	20-500 ppb	up to 2500 ppb	20 min

*When extra dilution is applied



STANDARD MYCOTOXINS



AN ACCURATE AND COST-EFFECTIVE ELISA METHOD

1-Standard ELISA series is a new innovative ELISA system, using a precalibrated curve for the quantification of mycotoxins in only 5 minutes.

Unlike the regular ELISA protocol that needs to have several standards for an accurate quantification method, the 1-standard ELISA requires only the first (analyte free) standard.

The precalibrated standard curve has been run multiple times in ProGnosis Biotech facilities and following thorough examinations and validations it is unique for every lot and it can be downloaded on Prognosis Data reader.

Product Name	Product Code	LOQ	Calibration Range	Max Range*	Duration
1-Standard Total	D4348	2.5 ppb	2.5-50 ppb	up to 250 ppb	5 min
1-Standard B1	D4948	2 ppb	2-50 ppb	up to 250 ppb	5 min
1-Standard DON	D4548	100 ppb	100-5000 ppb	up to 2500 ppm	5 min
1-Standard ZON	D4448	25 ppb	25-500 ppb	up to 2500 ppb	5 min
1-Standard Fumonisin	D4748	200 ppb	200-6000 ppb	up to 30000 ppb	5 min
1-Standard Ochratoxin	D4148	2 ppb	2-40 ppb	up to 200 ppb	8 min
1-Standard T-2/HT-2	D4248	20 ppb	20-500 ppb	up to 2500 ppb	8 min

*When extra dilution is applied



**ONLY ONE STANDARD NEEDED
5-MIN ELISA METHOD
SHELF LIFE: 12 MONTHS**

HISTAMINE

ELISA | LATERAL FLOW



Histamine (HA) is best known as a mediator of allergic reactions, but it is now recognized to participate in numerous other normal and pathologic processes.

Histamine is a heterocyclic primary amine and is the by-product of the decarboxylation of the amino acid L-histidine by the enzyme histidine decarboxylase. The latter is produced by certain bacteria that can be found in seafood.

The most common fish species that tend to accommodate HA belong to the scombroid family of fish (tuna, mahi mahi, marlin, bluefish, sardines, anchovy, bonito, herring and mackerel). After the fish are harvested the bacterial growth results in increasing histidine decarboxylase amounts which in turn induces HA production.

High levels of Histamine may cause scombroid poisoning in humans which consists of various symptoms, such as rash, nausea, vomiting, diarrhea, hypotension, heart palpitations and muscle weakness. Histamine levels in fish of good quality are usually below 10 ppm.



BROAD RANGE OF QUANTIFICATION
OPTIONAL VISUAL DETECTION LIMIT AT 35 PPM
FAST PROTOCOLS
NO ACYLATION REQUIRED

Product Name	Product Code	LOQ	Calibration Range	Duration
Bio-Shield Histamine	B6048/96	2.5 ppm	2.5-200 ppm	20 min
Symmetric Histamine	S9030	8 ppm	8-300 ppm	3 min
1-Standard Histamine	D4648	2.5 ppm	2.5-200 ppm	20 min

ELISA ALLERGENS



Food allergies and other types of food hypersensitivities affect millions of people all over the world.

Food allergies occur when the body's immune system reacts to certain proteins in food. Food allergic reactions vary in severity from mild symptoms involving hives and lip swelling to severe, life-threatening symptoms, often called anaphylaxis, that may involve fatal respiratory problems and shock.

While promising prevention and therapeutic strategies are being developed, food allergies currently cannot be cured. Early recognition and learning how to manage food allergies, including which foods to avoid, are important measures to prevent serious health consequences.



Product Name	Product Code	LOQ	Calibration Range	Max Range*	Duration
Allergen-Shield Egg	A1148/96	1 ppm	1-20 ppm	up to 100 ppm	30 min
Allergen-Shield Glutein S	A1048/96	5 ppm	5-80 ppm	up to 400 ppm	30 min
Allergen-Shield Total Milk	A1448/96	2.5 ppm	2.5-6.75 ppm	up to 337.5 ppm	30 min
Allergen-Shield Almond	A1548/96	1 ppm	1-25 ppm	up to 125 ppm	30 min
Allergen-Shield Hazelnut	A1648/96	1 ppm	1-25 ppm	up to 125 ppm	30 min
Allergen-Shield BLG	A1348/96	0.15 ppm	0.15-0.45 ppm	up to 22.5 ppm	30 min
Allergen-Shield Casein	A1248/96	2.5 ppm	2.5-67.5 ppm	up to 2.5-67.5 ppm	30 min
Allergen-Shield Peanut	A1748/96	1 ppm	1-25 ppm	up to 125 ppm	30 min
Allergen-Shield Soy	A1848/96	1 ppm	1-25 ppm	up to 125 ppm	30 min
Allergen-Shield Cashew	A1948/96	1 ppm	1-25 ppm	up to 125 ppm	30 min
Allergen-Shield Pistachio	A2148/96	1 ppm	1-25 ppm	up to 125 ppm	30 min
Allergen-Shield Walnut	A2348/96	1 ppm	1-25 ppm	up to 125 ppm	30 min

*When extra dilution is applied



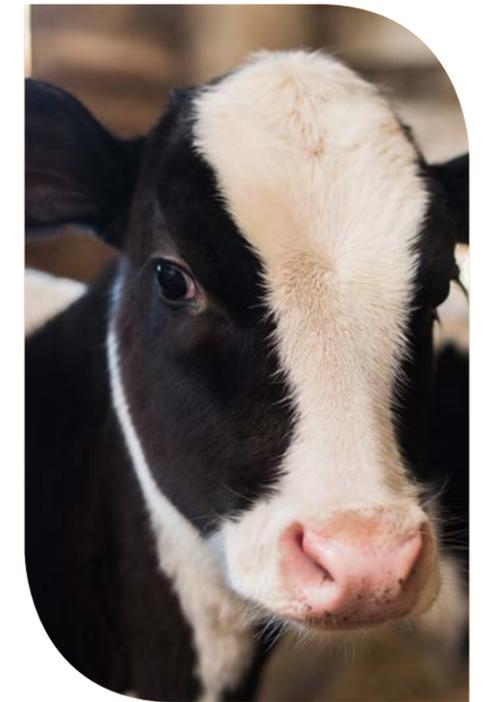
ELISA

MILK ADULTERATION

Higher priced milk with limited seasonal availability is commonly and fraudulently adulterated with lower milk price from different dairy animals like cow. Adulterated milk either used in direct human consumption or in cheese manufacture (like feta, which is recognized as Protected Designation of Origin, PDO) results in a final product inferior to that expected by the consumer.

In addition, Cow's milk allergy (CMA) is one of the most common food allergies, while Goat's milk is also associated with a rare allergy disorder. Therefore, cow or goat milk must be declared as ingredients on food labels.

Milk adulteration can be detected by toilsome methods such as chromatography and electrophoresis requiring though highly sophisticated and expensive equipment and consequently are considered of limited value for the usual screening of milk.



Product Name	Product Code	LOQ	Calibration Range	Duration
Bio-Shield Cow	B1248/96	0.15%	0.15-4%	85 min
Bio-Shield Goat	B1148/96	0.2 %	0.2-25 %	85 min
Bio-Shield Cow Cheese	B1748	0.15 %	0.15-4 %	85 min

ANALYTICAL TECHNOLOGIES



INTUITIVE SOFTWARE SOLUTIONS DESIGNED TO FACILITATE YOUR ANALYSIS AND RESULTS REPORTING

PROGNOSIS DATA READER ELISA Analysis

If you are running our ELISA kits, we offer a stand alone, easy to use, statistics analysis program that is designed to streamline your laboratory data analytics and reports process.

The Prognosis data reader has the ability to import the microplate readout values from the spectrophotometer and automatically create a full analytic report of the ELISA results without any additional efforts from a user. Customized reporting is available through our software solutions team.



S-FLOW SOFTWARE our NextGen Lateral Flow Analysis

S-Flow is our flexible software platform that facilitates the quantitative analysis of one or more lateral flow devices.

This platform can be continuously updated with the lateral flow test calibration data to ensure the user obtains accurate results on the field every time. Customized results reporting is also available through our software solutions team.

INTUITIVE LATERAL FLOW READERS

FIELD DEPLOYABLE HARDWARE FOR USE WITH OUR LATERAL FLOW KITS

3PR MINI



With our newly developed 3PR field reader, users can obtain fast, easy and quantitative results with the Prognosis Biotech Lateral flow devices within minutes. The system is lightweight and operates on Bluetooth connection for operation with a portable tablet device.

Benefits:

- Fast and lightweight, which enables users to obtain results on site without any special equipment.
- Capable of analyzing three strips at a time in just a few seconds
- Does not require any special training to operate
- Bluetooth controlled by a windows enabled tablet device

S-FLOW READER

The Prognosis Biotech S-Flow reader is designed to provide high throughput analysis of our lateral flow devices.

Benefits:

- Precise and fast scanning process
- Can analyze up to six strips at a time in just a few seconds

Capable to read different product test strips simultaneously

- Does not require any special training to operate
- Field deployable





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