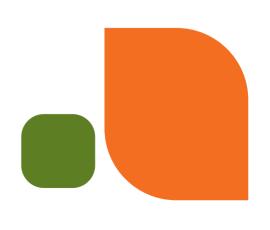


# PRODUCT CATALOG R&D, IN VITRO DIAGNOSTICS FOR FOOD SAFETY





# 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 industries.

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 70 countries worldwide. In a continuous challenging environment, ProGnosis Biotech has earned an important role in the food diagnostics industry by providing innovative solutions. The company is always devoted in constant 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 to 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 the 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 product quality is concerned, ProGnosis Biotech SA adheres to the rules of Good Manufacturing Practices (GMP) and the International Organization for Standardization (ISO). It is certified with ISO 9001:2015 for the development, manufacturing, and marketing of diagnostic and laboratory products, ISO 13485 for the design, development, production, installation, and servicing of medical devices, and ISO 37001 for anti-bribery management systems.

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) and BIPEA (France).



# LATERAL FLOW



# LATERAL FLOW | GMO

# GMO DETECTION | CP4 EPSPS

Many countries have regulations regarding the cultivation, sale, and labeling of genetically modified crops. CP4 EPSPS, or 5-enolpyruvylshikimate-3-phosphate synthase from *Agrobacterium tumefaciens* strain CP4, is an enzyme associated with genetically modified organisms (GMOs). Its presence serves as a genetic marker, indicating genetic modification. Rapid Test CP4 EPSPS differentiates between GMO and non-GMO samples fast and easily utilizing lateral flow technology.



| Product Name         | <b>Product Code</b> | LOQ   | Quantification Range | Duration |
|----------------------|---------------------|-------|----------------------|----------|
| Rapid Test CP4 EPSPS | R2130/60            | 0.05% | 0-2 %                | 5 min    |



ANTIBIOTICS - MYCOTOXINS



# QUANTUM READ A BINARY ANSWER IN THE SHORTEST POSSIBLE TIME

Quantum Series involves preparing a Quantum read, which is a method that exploits the properties of quantification mechanics of lateral flow, in order to obtain a binary answer in the shortest possible time.

It reads through different timelines and resembles the logic of the superposition of two states of quantum mechanics. It comes in a cassette format and the outcome of the measurement, positive or negative, depends on the probability distribution of the states in different time readings of the chemical reaction.

QUANTUM TESTS CAN BE READ EASILY ON THE GO WITH OUR MOBILE APP! QUANTIFICATION IS MOVING OUTSIDE THE LAB.

FROM FARM TO CLOUD



3 drops of cold milk No incubation needed

Quantitative Results & GPS location



## **QUANTUM AFLATOXIN M1**

for the detection of Aflatoxin M1 in cow, sheep and goat milk, with no incubation needed.

| Product Name |          |       | Quantitative<br>Results in |  |
|--------------|----------|-------|----------------------------|--|
| Quantum M1   | W3130/60 | 8 min | 15 min                     |  |



for the detection of β-Lactams, Cefalexin, Tetracyclines, Sulfonamides, Quinolones, Streptomycycin and Chloramphenicol in cow, sheep and goat milk

| Product Name               | Product Code | Negative<br>Results in | Final<br>Results in |
|----------------------------|--------------|------------------------|---------------------|
| Quantum BT-Cef ILVO   LILC | W1030/60     | <b>90</b> sec          | 5 min               |
| Quantum BT-S ILVO          | W1130/60     | <b>90</b> sec          | 5 min               |
| Quantum BT-SQ              | W1230/60     | <b>2</b> min           | 5 min               |
| Quantum BT-SC              | W1330/60     | <b>2</b> min           | 5 min               |
| Quantum BL                 | W1430/60     | <b>60</b> sec          | 2 min               |



**QUANTUM BT-CEF AND QUANTUM BT-S** RECEIVED THE ILVO VALIDATION





## **QUANTUM MYCOTOXINS**

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

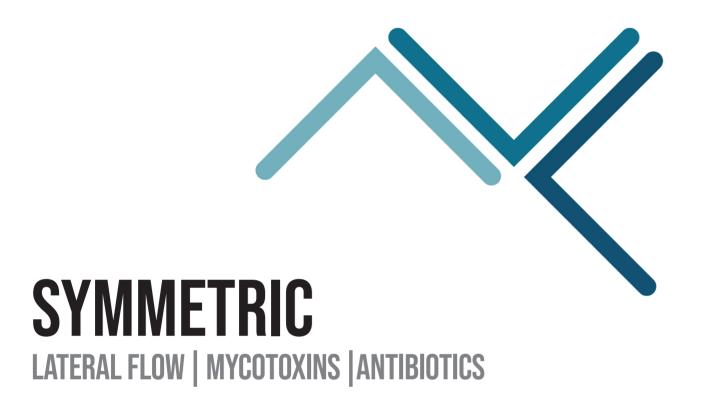
| Product Name                 | Product Code | Negative<br>Results in | Quantitative<br>Results in |
|------------------------------|--------------|------------------------|----------------------------|
| Quantum Don W.E.             | G4118/40     | <b>30</b> sec          | 90 sec                     |
| Quantum Don Green            | G4018/40     | <b>45</b> sec          | 2 min                      |
| Quantum Fumonisin Green USDA | G7018/40     | <b>45</b> sec          | 2 min                      |
| Quantum Ochratoxin Green     | G6018/40     | 2 min                  | 4 min                      |
| Quantum Zon Green            | G5018/40     | 2 min                  | 4 min                      |
| Quantum Total 0-30 Green     | G3418/40     | 2 min                  | 4 min                      |
| Quantum T2-HT2 Green         | G8018/40     | 2 min                  | 4 min                      |







**QUANTUM FUMONISIN GREEN** IS APPROVED BY USDA



#### 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, SYMMETRIC B+T AND SYMMETRIC BTS RECEIVED THE ILVO VALIDATION



| Product Name      | <b>Product Code</b> | LOQ    | Quantification Range | Duration |
|-------------------|---------------------|--------|----------------------|----------|
| Symmetric M1 ILVO | S2148/96            | 8 ppt  | 8-150 ppt            | 10 min   |
| Symmetric M1 1000 | S2448/96            | 70 ppt | 70 -1000 ppt         | 3 min    |
| Symmetric M1 400  | S2548/96            | 12 ppt | 12-400 ppt           | 10 min   |

| Product Name                      | <b>Product Code</b> | Duration |
|-----------------------------------|---------------------|----------|
| Symmetric B+T ILVO   LILC   PIWET | S1048/96            | 5 min    |
| Symmetric BTS ILVO                | S1248/96            | 5 min    |
| Symmetric BTSC (RU MRLs)          | S1448/96            | 10 min   |
| Symmetric Tetracyclines in Honey  | S0124               | 10 min   |



#### SYMMETRIC ANTIBIOTICS

for the detection of B-Lactams, Tetracyclines, Sulfonamides, Streptomycycin & Chloramphenicol in milk, and Tetracyclines in honey









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

| Product Name                | <b>Product Code</b> | LOQ      | Quantification Range | Duration |
|-----------------------------|---------------------|----------|----------------------|----------|
| Symmetric B1 ES             | S3124/48            | 0.70 ppb | 0.70 - 20 ppb        | 10 min   |
| Symmetric Total ES          | S3224/48            | 0.35 ppb | 0.35 -10 ppb         | 10 min   |
| Symmetric Ochratoxin Coffee | S6324/48            | 0.90 ppb | 0.90 - 20 ppb        | 10 min   |
| Symmetric Ochratoxin ES     | S6424/S6448         | 0.70 ppb | 0.7-20 ppb           | 10 min   |



# 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               | <b>Product Code</b> | LOQ     | Quantification Range | Duration |
|----------------------------|---------------------|---------|----------------------|----------|
| Symmetric B1 Green         | S3724/48            | 1.3 ppb | 1.3-30 ppb           | 3 min    |
| Symmetric Total Green 0-30 | S3424/48            | 1.3 ppb | 1.3-30 ppb           | 3 min    |
| Symmetric DON Green        | S4024/48            | 150 ppb | 150-5000 ppb         | 3 min    |
| Symmetric Ochratoxin Green | S6024/48            | 1 ppb   | 1-20 ppb             | 3 min    |
| Symmetric ZON Green        | S5024/48            | 35 ppb  | 35-800 ppb           | 3 min    |
| Symmetric Fumonisin Green  | S7024/48            | 150 ppb | 150-4000 ppb         | 3 min    |
| Symmetric T-2/HT-2 Green   | S8024/48            | 40 ppb  | 40-600 ppb           | 3 min    |

| <b>Product Name</b>       | <b>Product Code</b> | LOQ      | Quantification Range | Duration |  |
|---------------------------|---------------------|----------|----------------------|----------|--|
| Symmetric Ochratoxin Wine | S6224/48            | 0.35 ppb | 0.35 - 5 ppb         | 5 min    |  |





# LATERAL FLOW | ALLERGEN

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.

# COMMON GREEN EXTRACTION & PROTOCOL FOR ALL ALLERGENS\*



QUANTITATIVE RESULTS



| <b>Product Name</b>   | <b>Product Code</b> | LOD     | Quantification Range | Duration |
|-----------------------|---------------------|---------|----------------------|----------|
| Almond Free Test      | E1010/30            | 1 ppm   | 2-128 ppm            | 5 min    |
| Hazelnut Free Test    | E1110/30            | 1 ppm   | 2-128 ppm            | 5 min    |
| Peanut Free Test      | E1210/30            | 2 ppm   | 4-128 ppm            | 5 min    |
| Walnut Free Test      | E1410/30            | 3 ppm   | 5-128 ppm            | 5 min    |
| Egg Free Test         | E1510/30            | 1 ppm   | 2-128 ppm            | 5 min    |
| Pistachio Free Test   | E1610/30            | 2 ppm   | 4-128 ppm            | 5 min    |
| Cashew Free Test      | E1710/30            | 3 ppm   | 4-128 ppm            | 5 min    |
| Pecan Free Test       | E1810/30            | 2 ppm   | 4-128 ppm            | 5 min    |
| Soy Free Test         | E1310/30            | 1.0 ppm | 1.5-50 ppm           | 5 min    |
| Gluten Free Test      | E1910/30            | 3 ppm   | 5-100 ppm            | 5 min    |
| Lupin Free Test       | E2310/30            | 0.5 ppm | 1-32 ppm             | 5 min    |
| Brazil Nut Free Test  | E2010/30            | 2.5 ppm | 5-128 ppm            | 5 min    |
| Mustard Free Test     | E2110/30            | 2 ppm   | 3-128 ppm            | 5 min    |
| Sesame Free Test      | E2410/30            | 3 ppm   | 5-128 ppm            | 5 min    |
| Crustaceans Free Test | E2910/30            | 2 ppm   | 3-150 ppm            | 5 min    |
| BLG Free Test         | E2710/30            | 1.5 ppm | -                    | 5 min    |
| Casein Free Test      | E2210/30            | 4 ppm   | 6-128 ppm            | 5 min    |
| Total Milk Free Test  | E2810/30            | 2 ppm   | -                    | 5 min    |

<sup>\*</sup> Except Milk

12





# 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<br>Code | LOD   | Quantification<br>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) | Q1130/120       | 0.1 % | 0.1-2 %                 | 3 min    |
| Rapid Test Goat (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







# **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  $\mu$ g/kg (50ppt) and 0.025  $\mu$ g/kg (25ppt) for infant food.



| <b>Product Name</b>             | <b>Product Code</b> | LOQ     | Quantification Range | Duration |
|---------------------------------|---------------------|---------|----------------------|----------|
| Bio-Shield M1 ES ILVO           | B2048/96/192        | 5 ppt   | 5-250 ppt            | 75 min   |
| Bio-Shield M1 BF<br>(Baby Food) | B3048/96/192        | 5 ppt   | 5-80 ppt             | 75 min   |
| Bio-Shield M1 Fast              | B2548/96            | 10 ppt  | 10-250 ppt           | 30 min   |
| Bio-Shield M1 UF MYD            | B2248/96            | 100 ppt | 100-1000 ppt         | 20 min   |

BIO-SHIELD M1 ES RECEIVED THE ILVO VALIDATION



# **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, Fumonisins, 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 SENSITIVITY LEVELS



| Product Name            | Product Code | LOQ      | Quantification Range | Duration |
|-------------------------|--------------|----------|----------------------|----------|
| Bio-Shield B1 5         | B5048/96     | 2 ppb    | 2-50 ppb             | 5 min    |
| Bio-Shield B1 OP        | B3348/96     | 2.5 ppb  | 2.5-50 ppb           | 20 min   |
| Bio-Shield B1 ES        | B2948/96     | 0.5 ppb  | 0.5-10 ppb           | 20 min   |
| Bio-Shield B1 BF        | B3148/96     | 0.06 ppb | 0.06-2.5 ppb         | 75 min   |
| Bio-Shield Total ES     | B2348/96     | 0.6 ppb  | 0.6-10 ppb           | 20 min   |
| Bio-Shield Total OP     | B3948/96     | 3 ppb    | 3-50 ppb             | 20 min   |
| Bio-Shield Ochratoxin 8 | B5448/96     | 2 ppb    | 2-40 ppb             | 8 min    |
| Bio-Shield Ochratoxin   | B2448/96     | 1.5 ppb  | 1.5-40ppb            | 20 min   |
| Bio-Shield ZON          | B2748/96     | 15 ppb   | 15-500 ppb           | 15 min   |
| Bio-Shield DON 5 W.E.   | B5748/96     | 100 ppb  | 100-5000 ppb         | 5 min    |
| Bio-Shield DON          | B2648/96     | 100 ppb  | 100-5000 ppb         | 20 min   |
| Bio-Shield DON M.E.     | B3848/96     | 100 ppb  | 200-5000 ppb         | 20 min   |
| Bio-Shield Fumonisin    | B2848/96     | 120 ppb  | 120-6000 ppb         | 15 min   |
| Bio-Shield T-2/HT-2 8   | B5648/96     | 20 ppb   | 20-500 ppb           | 8 min    |
| Bio-Shield T-2/HT-2     | B3248/96     | 20 ppb   | 20-500 ppb           | 15 min   |
| Bio-Shield T2           | B4148/96     | 6 ppb    | 20-500 ppb           | 20 min   |



# BIO-SHIELD TOTAL 5, ZON 5, FUMONISIN 5 & DON 5 ARE APPROVED BY USDA

| Bio-Shield Total 5 <b>USDA</b> | B5148/96 | 2.5 ppb | 2.5-50 ppb   | 5 min |
|--------------------------------|----------|---------|--------------|-------|
| Bio-Shield ZON 5 <b>USDA</b>   | B5348/96 | 25 ppb  | 25-500 ppb   | 5 min |
| Bio-Shield Fumonisin 5 USDA    | B5548/96 | 200 ppb | 200-5000 ppb | 5 min |
| Bio-Shield DON 5 USDA          | B5248/96 | 100 ppb | 100-5000 ppb | 5 min |

18



## 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 can be downloaded on the ProGnosis Data Reader.

| <b>Product Name</b>   | <b>Product Code</b> | LOQ     | Quantification Range | Duration |
|-----------------------|---------------------|---------|----------------------|----------|
| 1-Standard Total      | D4348               | 2.5 ppb | 2.5-50 ppb           | 5 min    |
| 1-Standard B1         | D4948               | 2 ppb   | 2-50 ppb             | 5 min    |
| 1-Standard DON        | D4548               | 100 ppb | 100-5000 ppb         | 5 min    |
| 1-Standard DON W.E.   | D4848               | 100 ppb | 100-5000 ppb         | 5 min    |
| 1-Standard ZON        | D4448               | 25 ppb  | 25-500 ppb           | 5 min    |
| 1-Standard Fumonisin  | D4748               | 200 ppb | 200-5000 ppb         | 5 min    |
| 1-Standard Ochratoxin | D4148               | 2 ppb   | 2-40 ppb             | 8 min    |
| 1-Standard T-2/HT-2   | D4248               | 20 ppb  | 20-500 ppb           | 8 min    |

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





# ELISA | ALLERGENS

The Allergen-Shield Series brings together the sensitivity of ELISA technology and the versatility of advanced multiplex capabilities. This allows for accurate detection and measurement of allergens in food samples, which in turn ensures the safety and allergen compliance of your products.



# SWABBING KITS AVAILABLE FOR ALL ALLERGENS

AS1020 |Allergen Shield Swabbing Kit AS1220 |Allergen Shield Swabbing Kit Gluten AS1120 |Allergen Shield Swabbing Kit Soy AS1320 |Allergen Shield Swabbing Kit Milk

| Product Name                  | <b>Product Code</b> | LOQ      | <b>Quantification Range</b> | Duration |
|-------------------------------|---------------------|----------|-----------------------------|----------|
| Allergen-Shield Gluten S      | A1048/96            | 5 ppm    | 5-80 ppm                    | 30 min   |
| Allergen-Shield Soy           | A1848/96            | 1 ppm    | 1-25 ppm                    | 30 min   |
| Allergen-Shield Buckwheat     | A3148/96            | 1 ppm    | 1-25 ppm                    | 30 min   |
| Allergen-Shield Total Milk*   | A1448/96            | 2.5 ppm  | 2.5-67.5 ppm                | 30 min   |
| Allergen-Shield Casein*       | A1248/96            | 0.5 ppm  | 0.5-30 ppm                  | 30 min   |
| Allergen-Shield BLG*          | A1348/96            | 0.15 ppm | 0.15-4.5 ppm                | 30 min   |
| Allergen-Shield Almond**      | A1548/96            | 1 ppm    | 1-25 ppm                    | 30 min   |
| Allergen-Shield Hazelnut**    | A1648/96            | 1 ppm    | 1-25 ppm                    | 30 min   |
| Allergen-Shield Peanut**      | A1748/96            | 1 ppm    | 1-25 ppm                    | 30 min   |
| Allergen-Shield Egg**         | A1148/96            | 1 ppm    | 1-20 ppm                    | 30 min   |
| Allergen-Shield Cashew**      | A1948/96            | 1 ppm    | 1-25 ppm                    | 30 min   |
| Allergen-Shield Pistachio**   | A2148/96            | 1 ppm    | 1-25 ppm                    | 30 min   |
| Allergen-Shield Walnut**      | A2348/96            | 2.5 ppm  | 2.5-100 ppm                 | 30 min   |
| Allergen-Shield Brazil Nut**  | A2948/96            | 1 ppm    | 1-25 ppm                    | 30 min   |
| Allergen-Shield Lupin**       | A2648/96            | 1 ppm    | 1-25 ppm                    | 30 min   |
| Allergen-Shield Macadamia**   | A2748/96            | 1 ppm    | 1-25 ppm                    | 30 min   |
| Allergen-Shield Mustard**     | A2848/96            | 1 ppm    | 1-25 ppm                    | 30 min   |
| Allergen-Shield Pecan**       | A2048/96            | 1 ppm    | 1-25 ppm                    | 30 min   |
| Allergen-Shield Pine Nut**    | A3048/96            | 1 ppm    | 1-25 ppm                    | 30 min   |
| Allergen-Shield Sesame**      | A2248/96            | 1 ppm    | 1-25 ppm                    | 30 min   |
| Allergen-Shield Coconut**     | A2448/96            | 1 ppm    | 1-25 ppm                    | 30 min   |
| Allergen-Shield Crustaceans** | A2548/96            | 5 ppm    | 5-100 ppm                   | 30 min   |
| Allergen-Shield Fish**        | A3248/96            | 4 ppm    | 4-100 ppm                   | 30 min   |

\*Common exctraction | \*\*Common exctraction

# ELISA ANTIBIOTICS

## **ELIMINATE ANTIBIOTIC RESIDUES IN FOOD**

Antibiotics are used in farming, aquacultures and apicultures as a method of treating bacterial infections and preventing the spread of disease in crowded conditions, which are common occurrence. Prognosis Biotech offers solutions for the detection of common antibiotic residues, such as Chloramphenicol, AHD, SEM, with its Bio-Shield Antibiotic Series.

SEM is an antibiotic residue belonging to the sulfonamide class of antibiotics. Sulfamethazine (SEM) is commonly used in veterinary medicine to treat bacterial infections in animals. Residues of SEM may be found in food products derived from animals treated with sulfamethazine, such as meat, milk, and eggs.

AHD or 4-aminohydantoin is a metabolite of the antibiotic nitrofurantoin. When nitrofurantoin is ingested, it undergoes biotransformation in the liver, leading to the formation of various metabolites, including AHD. Nitrofurans represent a class of synthetic antibiotics extensively utilized in agriculture to combat bacterial infections in farm animal, but their carcinogenic nature, poses potential threats to human health. Chloramphenicol, a broad-spectrum antibiotic widely used in veterinary medicine, poses potential health risk to consumers when present in food products as it is a recognized carcinogen. As such, its use is strictly regulated.



| Product Name               | <b>Product Code</b> | LOQ        | Quantification<br>Range | Duration |
|----------------------------|---------------------|------------|-------------------------|----------|
| Bio-Shield Chloramphenicol | B8048/96            | 0.0125 ppb | 0-1 ppb                 | 40 min   |
| Bio-Shield AHD             | B8148/96            | 0.1 ppb    | 0.1 - 2.5 ppb           | 30 min   |
| Bio-Shield SEM             | B0048/96            | 0.2 ppb    | 0.2-10 ppb              | 45 min   |

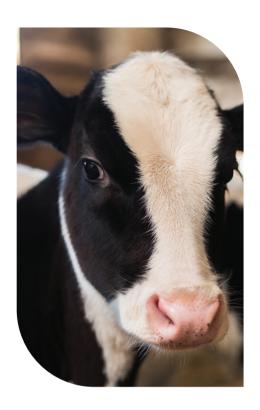


# ELISA MILK ADULTERATION

Higher priced milk with limited seasonal availability is commonly and fraudulently adulterated with lower priced milk 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. As they require highly sophisticated and expensive equipment, they are consequently considered of limited value for the usual screening of milk.



| Product Name                          | <b>Product Code</b> | LOQ    | <b>Quantification Range</b> | Duration |
|---------------------------------------|---------------------|--------|-----------------------------|----------|
| Bio-Shield Adulteration Cow           | B0248/B0296         | 0.15%  | 0.15-4%                     | 85 min   |
| Bio-Shield Adulteration Goat          | B0148/B0196         | 0.35 % | 1-25 %                      | 85 min   |
| Bio-Shield Adulteration<br>Cow Cheese | B0348               | 0.15 % | 0.15-4 %                    | 85 min   |

26

# 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     | Quantification Range | Duration |
|----------------------|--------------|---------|----------------------|----------|
| Bio-Shield Histamine | B6048/96/576 | 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   |

# ATP CLEANING VERIFICATION





# **ATP FLOW**

# **SURFACE AND WATER TESTING**

**EFFICIENT REAL-TIME HYGIENE MONITORING** 

ProGnosis Biotech's advanced ATP Surface and Water Testing Series, called ATP FLOW, is the answer to proper hygiene monitoring and cleanliness verification.

ATP serves as a reliable indicator of microbial presence or residues that may foster their growth.

ATP FLOW is ideal for testing surfaces, while ATP FLOW TOTAL allows the detection of both microbial and non-microbial ATP in water samples, with its special sampling tip.

| Product Name                    | Product Code |
|---------------------------------|--------------|
| ATP-FLOW (Surface ATP Test)     | SW1020       |
| ATP-FLOW Total (Water ATP Test) | SW1120       |



# HARDWARE & SOFTWARE



# 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 of reading different product test strips simultaneously
- · Does not require any special training to operate
- · Field deployable



# INTUITIVE SOFTWARE SOLUTIONS

#### DESIGNED TO FACILITATE YOUR ANALYSIS AND RESULTS REPORTING



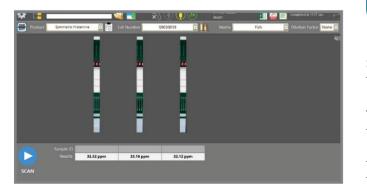
#### PROGNOSIS DATA READER

**ELISA Analysis** 

If you are running our ELISA kits, we offer a standalone, 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 Next Generation 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.



ProGnosis Biotech created an android mobile app that provides fast results for food safety testing in the field. This app offers quantitative results and GPS location, making it easier for non-specialized personnel to access remote testing. It connects to the 3PR mini reader via Bluetooth and saves results to the cloud for real-time viewing in the lab.





35

# ACCURACY THROUGH INNOVATION





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