Food & Feed Safety Kits

Drug Residue Testing for the Food & Feed Industry

Growth Hormones  Antibiotics  Mycotoxins  Fungicide

Anthelmintic  NSAIDS  Coccidiostats  Aminoglycosides

ISO 13485 accredited company

Phone: +44 (0)2894 468786  |  Website: www.biorexfooddiagnostics.com
Food & Feed Diagnostics

Introduction

The use of veterinary drugs used in food producing animals must be monitored globally to ensure that the food that we eat are safe for consumption.

Zero tolerance or sufficient drug withdrawal times are applied to these drugs when used by producers to eliminate any residues of the drugs being passed into the human food chain.

Biorex Food Diagnostics

At Biorex we offer a wide range of ELISA’s, strip tests and enzymatic assays for the rapid detection of microbial and industrial contaminants, natural toxins, constituents, hormones, antibiotics and other veterinary drug residues found in food and feed.

These kits can be used to test animal urine and foodstuffs such as meat, seafood, honey, milk and eggs. Our Mycotoxin range of kits can be used to test cereal, corn, nuts, silage, dried fruits and cottonseed that animals consume during animal husbandry.

Drug Residue Testing

Growth Hormones

• Beta Agonist/Ractopamine FAST
• Beta Agonist/Ractopamine Urine FAST

Both of the above kits simultaneously detects the presence of multiple beta agonists compounds and Ractopamine.

Antibiotics

• Chloramphenicol
• Fluoroquinolones
• Tetracylines / Epimers
• Nitrofuran Aoz FAST
• Nitrofuran Amoz FAST

Mycotoxins

• Total Alfatoxin
• Orchratoxin A / B /C
Introduction

Biorex Food Diagnostics offers one single test kit for the detection of multiple beta agonist compounds including salbutamol (80% Spec.) and Ractopamine (80% Spec.).

Beta Agonist / Ractopamine FAST

Size and Principle
96T Competitive Enzyme immunoassay

Total Assay time
50mins

Samples
Muscle, liver and feed.

Sensitivity (cut off)
Feed 2 ppb
Serum 0.3 ppb
Muscle/Liver M1 0.8 ppb
Muscle/Liver M2 0.2 ppb
0.4 ppb (Liver)

Specificity
Clenbuterol (100%), Mabuterol, Salbutamol, Cimbuterol, Mapenterol, Bromobuterol, Cimaterol, Ractopamine, Tulobuterol, Zilpaterol.

Beta Agonist / Ractopamine URINE FAST

Size and Principle
96T Competitive Enzyme immunoassay

Total Assay time
50mins

Samples
Urine

Sensitivity (cut off)
0.25 ppb

Specificity

<table>
<thead>
<tr>
<th></th>
<th>Clenbuterol</th>
<th>Salbutamol</th>
<th>Ractopamine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feed</td>
<td>2 ppb</td>
<td>2.5 ppb</td>
<td>2.5 ppb</td>
</tr>
<tr>
<td>Muscle/Liver M1</td>
<td>0.8 ppb</td>
<td>1 ppb</td>
<td>1 ppb</td>
</tr>
<tr>
<td>Muscle/Liver M2</td>
<td>0.2 ppb</td>
<td>0.25 ppb</td>
<td>0.25 ppb</td>
</tr>
<tr>
<td>Urine</td>
<td>0.25 ppb</td>
<td>0.32 ppb</td>
<td>0.32 ppb</td>
</tr>
<tr>
<td>Serum</td>
<td>0.3 ppb</td>
<td>0.375 ppb</td>
<td>0.375 ppb</td>
</tr>
</tbody>
</table>

Table showing expected detection limits for salbutamol & Ractopamine equivalences to clenbuterol standardisation.
## Antibiotics

<table>
<thead>
<tr>
<th>Antibiotics</th>
<th>Size and Principle</th>
<th>Total Assay time</th>
<th>Samples</th>
<th>Sensitivity (cut off)</th>
<th>Specificity</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chloramphenicol ELISA kit</strong></td>
<td>96T Competitive Enzyme immunoassay</td>
<td>60 mins</td>
<td>Urine, shrimps, meat, feed, honey, milk and egg.</td>
<td>Milk 0.1 ppb</td>
<td>Chloramphenicol (100%), Chloramphenico glucuronide</td>
</tr>
<tr>
<td><strong>Fluoroquinolones ELISA kit</strong></td>
<td>96T Competitive Enzyme immunoassay</td>
<td>80 mins</td>
<td>Muscle/shrimp, honey and milk.</td>
<td>0.016 ppb</td>
<td>Enrofloxacin (100%), Ciprofloxacin, Ofloxacin, Danofloxacin, Pefloxacin, Enoxacin and Fleroxacin.</td>
</tr>
<tr>
<td><strong>AOZ ELISA FAST kit</strong></td>
<td>96T Competitive Enzyme immunoassay</td>
<td>50 mins</td>
<td>Fish, shrimp, egg, chicken, milk and honey.</td>
<td>0.1 ppb (all matrices)</td>
<td>AOZ (100%)</td>
</tr>
<tr>
<td><strong>AMOZ ELISA FAST kit</strong></td>
<td>96T Competitive Enzyme immunoassay</td>
<td>50 mins</td>
<td>Fish, shrimp, chicken, egg, milk and honey.</td>
<td>0.1 ppb (all matrices)</td>
<td>AOZ (100%)</td>
</tr>
<tr>
<td><strong>Tetracycline / Plus Epimers ELISA kit</strong></td>
<td>96T Competitive Enzyme immunoassay</td>
<td>90 mins</td>
<td>Meat, milk, honey and shrimp.</td>
<td>Honey 4 ppb</td>
<td>Tetracycline (100%), Chlortetraacycline, Doxytetraacycline, Oxytetraacyline</td>
</tr>
</tbody>
</table>

**Note:** AHD and SEM released early 2015
**Mycotoxin**

**Total Alfatoxin ELISA kit**

**Size and Principle**
96T Competitive Enzyme immunoassay

**Total Assay time**
20 mins

**Samples**
Corn and nuts.

**Sensitivity (cut off)**
Corn 0.4 ppb  
Nuts 0.6 ppb

**Specificity**
Alfatoxin B1 (100%), Alfatoxin B2, Aflatoxin G1, Alfatoxin G2

**Ochratoxin A / B / C ELISA kit**

**Size and Principle**
96T Competitive Enzyme immunoassay

**Total Assay time**
80 mins

**Samples**
Grains, coffee, cocoa, wine, beer and petfood.

**Sensitivity (cut off)**
Green/Roasted Coffee  2.5 ppb  
Grains 1.25 ppb  
Beer 0.5 ppb  
Wine 1.75 ppb  
Dried Pet Food 5 ppb

**Specificity**
Ochratoxin A (100%),  
Ochratoxin B and  
Ochratoxin C
Fungicide

Malachite Green ELISA kit

Size and Principle
96T Competitive Enzyme immunoassay

Total Assay time
enquire

Samples
enquire

Sensitivity (cut off)
enquire

Specificity
Malachite Green/
Leucomalachite Green (100%)

Note: Released early 2015

Anthelmintic

Ivermectin ELISA kit

Size and Principle
96T Competitive Enzyme immunoassay

Total Assay time
enquire

Samples
enquire

Sensitivity (cut off)
enquire

Specificity
Ivermectin (100%), Doramectin,
Abamectin

Note: Released early 2015
# Ordering Information

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>CAT NO</th>
<th>METHODOLOGY</th>
<th>SIZE</th>
</tr>
</thead>
<tbody>
<tr>
<td>AOZ</td>
<td>BXEFA01A</td>
<td>ELISA</td>
<td>96T</td>
</tr>
<tr>
<td>AMOZ</td>
<td>BXEFA02A</td>
<td>ELISA</td>
<td>96T</td>
</tr>
<tr>
<td>Beta Agonist/Ractopamine FAST</td>
<td>BXEFA03A</td>
<td>ELISA</td>
<td>96T</td>
</tr>
<tr>
<td>Beta Agonist/Ractopamine URINE FAST</td>
<td>BXEFA04A</td>
<td>ELISA</td>
<td>96T</td>
</tr>
<tr>
<td>Fluoroquinolones</td>
<td>BXEFA05A</td>
<td>ELISA</td>
<td>96T</td>
</tr>
<tr>
<td>Tetracycline/plus epimers</td>
<td>BXEFA06A</td>
<td>ELISA</td>
<td>96T</td>
</tr>
<tr>
<td>Ochratoxin A/B/C</td>
<td>BXEFA07A</td>
<td>ELISA</td>
<td>96T</td>
</tr>
<tr>
<td>Total Aflatoxin</td>
<td>BXEFB01A</td>
<td>ELISA</td>
<td>96T</td>
</tr>
<tr>
<td>Chlormaphenicol</td>
<td>BXEFDO1A</td>
<td>ELISA</td>
<td>96T</td>
</tr>
</tbody>
</table>
Get in touch

Biorex Diagnostics Limited
Unit 2C Antrim Technology Park
Muckamore
Antrim, BT41 1QS
Northern Ireland
United Kingdom

Phone +44 (0)2894 468786
Fax +44 (0)2894 469933
Email info@biorexfooddiagnostics.com

ISO 13485 accredited company

Authorised Distributor:

Phone: +44 (0)2894 468786 | Website: www.biorexfooddiagnostics.com