

# EZ Pangasius™



A Fast, Sensitive and Simple Test For the Detection of Cooked or Raw Pangasius Filets

INSTRUCTIONS FOR USE Cat. No. 510EZPANG

## WHY IS PANGASIUS DETECTION IMPORTANT?

The Pangassidae family, which is composed of the Pangasius and Helicophagus genera, is indigenous to Southeast Asia. These fish are amenable to aquaculture practices, and are farmed heavily in the Mekong Delta region of Vietnam. The two main species of farmed Pangassids Pangasius bocourti and *Pangasius* are (basa) hypothalamus (tra). Production of Pangasius species has increased from 10,000 tons in 1995 to over 1.1 million tons in 2008, with a large percentage of these fish shipped to Europe and the United States (1). As the volume of Pangasius imports has increased, so have the incidents of substitution, wherein a Pangasius filet is sold as grouper, snapper, U.S. catfish, or other variety of more expensive filets. In order to insure that consumers are not receiving misbranded products, and to detect incidences of substitution, it is important to be able to differentiate Pangasius filets from those of other fish.

## PURPOSE OF THE EZ PANGASIUS ASSAY

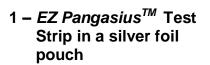
The EZ Pangasius assay is an easy-to-use field test that will quickly identify cooked or raw filets as Pangasius. It was designed to positively identify filets from Pangasius while not reacting to filets from other fish species.

## **HOW THE TEST WORKS**

The EZ Pangasius assay uses a proprietary monoclonal antibody. In the EZ Pangasius test, a filet is diced, and a small portion (0.5g) is added to the extraction solution and mixed. A few drops of the extract are then placed into a test tube. The EZ Pangasius test strip is inserted into this test tube and allowed to absorb the sample extract. At 10 minutes, the strip can be read visually to determine if the sample is or is not Pangasius.

## MATERIALS PROVIDED FOR THE EZ PANGASIUS ASSAY







1 – Vial of Extraction Solution (with cap)



1 - Test Tube







1 - Measuring Spoon

## MATERIALS WHICH MAY BE USED BUT ARE NOT PROVIDED

- Knives or cutting boards for preparing sample
- Scale for measuring exactly 0.5g of sample

## **PRECAUTIONS**

- For testing cooked or raw fish filets only.
- Do not use for testing meat from any terrestrial species.
- Completely thaw frozen samples before testing.
- Do not re-use the test stick
- Do not use any part of the test beyond the expiration date.
- Do not open the foil pouch until just before use.
- Always store the kits between 2 and 25° C; avoid freezing.
- Allow all kit components to come to room temperature before use.
- In case of contact of any reagent with eyes or skin; rinse immediately with plenty of water.

#### **DETAILED TEST INSTRUCTIONS**

## **Sample Preparation**

- 1. Prior to testing, the person using the kit should wash their hands and make sure that the surface they are working on is clean and clear of any clutter.
- 2. Dice or mince a portion of the filet to be tested, preferably from the center of the filet (too avoid issues of surface contamination).

## **Sample Testing**

1. Measure out one level spoonful of the diced filet using the spoon provided, or weigh out 0.5g of the sample on a scale.



2. Add the spoonful (0.5g) of sample to the vial containing the Extraction Solution.



- 3. Replace the cap on the Extraction Solution and invert gently for 2 minutes.
- 4. Set the vial down upright and let the contents settle for 10 minutes.
- 5. Mix gently (invert 2 or 3 times) again right before using the transfer pipette provided to transfer 10 drops of the extraction solution into the test tube. Hold the pipette vertically when transferring the liquid. The cap from the vial of extraction solution may be turned upside-down and used to hold the test tube.



## **Sample Testing (continued)**

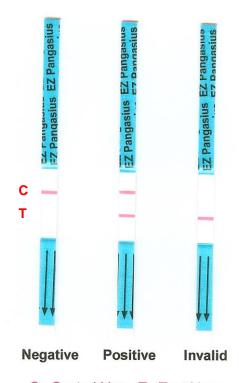
6. Remove the test strip from the silver foil pouch and insert it into the test tube with the arrows pointing down



7. Leave the test strip undisturbed in the test tube for 10 minutes

- 8. Remove the strip from the test tube and hold it alongside the picture to read your result. There can be three possible results:
  - Negative (sample is not Pangasius): The red control line is present, but there is no red test line
  - Positive (sample is Pangasius): Both the red control and red test lines are present.

Invalid (test failure): There are either no lines, or only a red test line with no red control line.



C= Control Line T= Test Line

## **TEST LIMITATIONS**

This kit may not detect Pangasius in samples that have been subject to extreme storage or cooking conditions.

### KIT VALIDATION

The EZ Pangasius Assay was extensively tested in our laboratory and gave equivalent results to genetic assays. A full copy of our validation report is available upon request.

### **REFERENCES**

1. World Wildlife Federation (2009)
<a href="http://wwf.worldwildlife.org/site/PageServer?pagename=PangasiusDraft">http://wwf.worldwildlife.org/site/PageServer?pagename=PangasiusDraft</a>
StandardsForm

## **EZ Pangasius QUICK INSTRUCTIONS**

- 1. Mince a section from the center of the fish filet to be tested
- 2. Add 0.5g or one level spoonful of the sample to the vial containing the Extraction Solution
- 3. Mix the vial gently by inversion for 2 minutes
- 4. Set the vial down and let the contents settle for 10 minutes
- 5. Gently invert the vial 2-3 more times, then transfer 10 drops of the solution into the test tube using the transfer pipette provided
- 6. Insert the EZ Pangasius test strip into the test tube with the arrows pointing down
- 7. Leave the test strip undisturbed in the test tube for 10 minutes
- 8. Remove the test strip from the test tube and compare it to the pictures on page 5 of this booklet to determine the result

### **DISCLAIMER**

The results obtained using ELISA Technologies, Inc.'s kits are accurate only when following the instructions given in the kit instruction booklet. ELISA Technologies, Inc. shall not be liable for any damages arisen from improper use of the kit or from any action undertaken as a consequence of results obtained. Use of the kit for any other purpose other than its intended use shall not be permitted.

#### **Revision notes**

140601.1 - Replaced old logo with new logo

### **MANUFACTURED BY:**



**ELISA** Technologies 2501 NW 66<sup>th</sup> Court

Gainesville, FL 32653 USA

Tel: (352) 337-3929

Fax: (352) 337-3928

Email: <u>info@elisa-tek.com</u> rev.140601.1

Web: elisa-tek.com

© ELISA Technologies, Inc. 2009 - All rights reserved