QuantiQuik™ Histamine Quick Test Strips

Catalog Number: QQHIST10

DESCRIPTION

HISTAMINE ($C_5H_9N_3$) is a biogenic amine naturally present in many foods and body cells in amounts without toxicological significance. It is also a contaminant mostly found in Scombridae family fishes, such as tuna and mackerel, as well as other seafood products when they are improperly handled or stored. The consumption of foods containing high levels of histamine may lead to an allergy-like food poisoning known as scombroid poisoning.

BioAssay Systems' QuantiQuik™ Histamine Quick Test Strips are based on histamine dehydrogenase catalyzed oxidation of histamine in which the formed electron mediator reduces a formazan (MTT) reagent. The intensity of product color is directly proportional to histamine concentration in the sample.

Product Information

Catalog No: QQHIST10

Number of Tests: 10 per package (other sizes available upon request).

Contents:

- Test Strips: QTY 10
- Extraction Buffer: 8 mL
- Sample Tubes: 10 ×
- Instruction Manual

Shipping/Storage: The kit is shipped and stored at room temperature. Keep strips dry and out of direct sunlight. For long term storage (> 30 days), we recommend keeping the Extraction Buffer at 4˚C or below.

Expiry: 6 months upon receipt.

Disclaimer: This kit is intended to be used as an initial screen for the presence of histamine. Negative results do not guarantee the absence of histamine.

Product Accessories

Sample dilutions can be performed either with a pipetteman if available or transfer pipettes can be purchased separately. We offer the following:

- Ten 1 mL Transfer Pipettes, Cat. No. TP1000
- Ten 400 µL Transfer Pipettes, Cat. No. TP400
- Ten 200 µL Transfer Pipettes, Cat. No. TP200

Fish and red wine samples require centrifugation. A centrifuge can be purchased separately. We offer the following:

- Mini Centrifuge, Cat. No. CTFG-100

Red wine samples must be cleared with PVPP powder. We also offer the following:

- Ten tubes with 40 mg PVPP, Cat No. PVPP-10

SAMPLE PREPARATION

SEAFOOD

1. Weigh 500 mg of fish and place it in a Sample tube. Then, use a pipetteman to add 500 µL of Extraction Buffer to the Sample tube and homogenize sample.

   Note: If a balance, pipetteman, or homogenizer is not available, an alternative approach is available: Use a 1 mL transfer pipette to fill an empty Sample tube with Extraction Buffer until the liquid reaches the 0.5 mark on the tube. Add a small piece of fish (about the size of the sample tube cap) to the tube. Enough fish should be added so that the level of liquid rises to the 1 mL mark on the tube. If a homogenizer is not available, briefly mash the fish until it breaks apart and vigorously shake the tube for 2 minutes.

2. Centrifuge the Sample tube for 5–10 minutes at full speed.

Dilution Factor=2

RED WINE

1. Weigh 40 mg of PVPP powder in an Eppendorf tube or obtain a pre-weighed tube of PVPP (Cat. No. PVPP-10). Use a 400 µL transfer pipette or pipetteman to transfer 400 µL of wine to the PVPP tube. Shake tube for 5 minutes. Then, centrifuge for 5–10 minutes at full speed.
2. Use a 200 µL transfer pipette and transfer 200 µL of Extraction Buffer to a Sample tube. Then, use a new transfer pipette to carefully transfer 200 µL of the wine supernatant from step 1 to the Sample tube.
3. Replace cap, securely close the vial and invert the Sample tube a couple of times to mix the diluted sample.

Dilution Factor=2

TEST PROCEDURE

1. Dip one of the test strips into the Sample tube. Make sure to fully submerge the reaction pad at the end of the strip. Leave submerged for 5 seconds and then take out and shake a couple times to remove any drops or debris clinging to strip.
2. Let color develop on strip for 5 minutes.
3. Compare the color of the reaction pad of the strip to the color on the provided Histamine Chart shown on the test strip bag. Multiply the concentration on the chart by the dilution used (i.e. 2) to determine the histamine concentration in the sample.

   Preparation protocols for samples other than fish and red wine can be provided upon request. Please contact Technical Support at info@bioassaysys.com.