

AOAC-RI PTM-CERTIFIED METHOD FOR HISTAMINE ANALYSIS

Histamine Test



SIMPLE

Just dissolve the reagents and mix with the sample

- ▶ The analysis procedure is simple and easy to operate. Due to the high specificity of the enzyme, no hazardous chemicals – such as strong acids or organic solvents – are needed.

RAPID

The reaction takes only 15 minutes

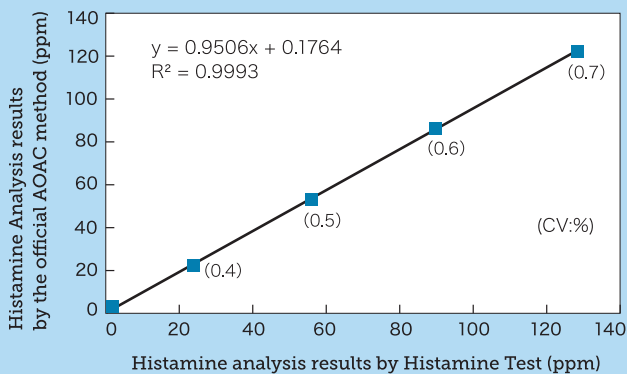
- ▶ For raw fish samples, the test can be fully completed - from sample preparation to result - in one hour.

ACCURATE

**AOAC-RI
PTM-Certified Method**

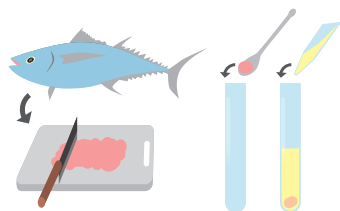
- ▶ The test has been shown to have a high correlation with the AOAC Fluorometric Method.

Correlation with the AOAC Fluorometric Method



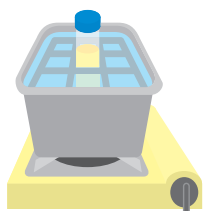
Assay Procedure (raw fish)

1 Prepare the Sample



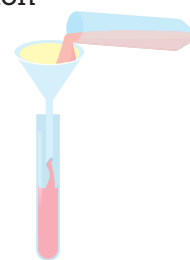
Mince the fish meat. For 1 g of sample, add 24 ml of sample treatment buffer, and stir. (The sample treatment buffer is not included in the kit.)

2 Extraction



Heat sample in boiling water bath for 20 minutes then cool in cold water.

3 Filtration



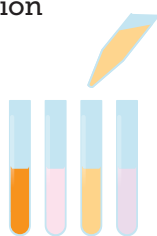
Filter sample to prepare the sample solution.

4 Preparing Reagents



Dissolve the colorimetric reagent in distilled water and dissolve the enzyme reagent in the buffer.

5 Reaction



Dispense 0.5 mL of the sample solution and both of the reagents into a tube and incubate at 37°C for 15 minutes (shielded from light).

6 Measure



Measure the absorbance of the reaction solution in each tube at 470 nm and calculate the concentration of the histamine.

Caution for use

- These reagents cannot be used for purposes other than in-house hygiene testing and research applications.
- In addition to the material supplied in the kit and an absorption spectrometer, apparatus such as a micropipette and EDTA solution are required for running the test.
- Histamine is prone to adhere to glass; therefore, apparatus made of plastic should be used.
- This Histamine Test is a colorimetric enzymatic assay for the quantitative analysis of histamine in fresh, frozen and canned Scombridae fish species such as tuna, bonito and mackerel.

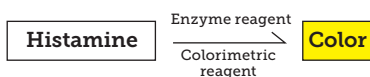
Matrices for which AOAC-RI PTM Certification has been granted

The test is AOAC-RI PTM certified for the determination of histamine in tuna (raw and frozen), bonito (raw and frozen), mackerel (raw and frozen), canned tuna (canned in water or oil) and fish sauce (where the ingredients anchovies). It can also be used for determination in other fish and products, etc. AOAC-RI is an international organization for the evaluation of analytical methods, and validation is further evidence of the reliability of the test.

Product Specifications

- Range of detection 0.4-6.0 ppm (10-150 ppm, since fish meat is diluted 25-fold)
- Product code: 61341 / for 60 assays

Principle of Measurement



In this method, histamine present in the sample reacts with the enzyme histamine dehydrogenase and a colorimetric reagent. Therefore, the quantitative level of histamine is determined by measuring the intensity of the color reaction.

※ Enzyme reagent: histamine dehydrogenase, Colorimetric reagent: WST-8

Recommended Spectrometers

- Absorption spectrometer B (Model ABS-B470)
- Absorption spectrometer RGB (Model DPM2-ABS)

For inquiries related to the measuring instruments

KYORITSU CHEMICAL-CHECK Lab.Corp.
Email:eng@kyoritsu-lab.co.jp Tel +81-3-3721-9207

※ A general-purpose spectrophotometer can also be used



Manufacturer

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