



Methylmercury Ions (CH₃Hg⁺) Rapid Test Strips (Water) (DTS806L)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Size	50T
Intended Use	This kit is intended for rapid test of Methylmercury ions(CH ₃ Hg ⁺) in water.
General Description	Mercury is a silvery room-temperature heavy metal and a chemical element. Mercury is found in natural ores deposits and manufactured devices such as barometers, thermometers, dry-cell batteries, switches, fluorescent light bulbs, and other various electronics. Different forms of mercury have different toxicity, in which inorganic mercury and elemental mercury generally do not accumulate in the body, while organic mercury tends to accumulate in the body. Long-term exposure to high concentrations of mercury vapor can cause lung damage and even death. Inorganic mercury is irritating to the skin, and chronic inorganic mercury poisoning mainly manifests as symptoms of kidney damage such as proteinuria and hematuria. Inorganic mercury in water can be converted into methylmercury through methylation reaction under the action of vitamins. Methylmercury is the most toxic form of mercury, has strong neurotoxicity, and can pass through the placental barrier, causing fetal brain damage and developmental damage. This form is rarely present in drinking water but is a very common contaminant in the tissues of fish and causes damage to the nervous system as well as teratogenesis. Both the CAC and the EU stipulate that the maximum limit of methylmercury in carnivorous fish is 1 mg/kg, and other fishes must not exceed 0.5 mg/kg.
Reagents And Materials Provided	1. Methylmercury ions test strips, 50 strips/bottle 2. Instruction, 1 pcs
Materials Required But Not Supplied	1.Pipette (20-200 µL, 100-1000 µL, 1-10 mL) 2.Consumables: gun tip, disposable gloves, centrifuge tube
Storage	The test strips and microwells should be stored in a cool and dry place at 2-8 °C, avoiding freezing.
Assay Procedure	1. Take the test card from the original package, and use within 1 hour. 2. Vertically drop 100 µL

of prepared sample solution into the sample well. 3. Start the timer as the added solution flows, react for 10 min, and determine the result according to "Interpretation of Results".

Interpretation Of Results

Negative (-): Color of Test Line(Line T) is deeper than Control Line (Line C) or the same color, indicating that the content of methylmercury ions in sample is lower than the LOD of the kit.
Positive (+): No color shows in Test line(Line T) or Color of Test Line (Line T) is lighter than Control Line(Line C) indicating that the methylmercuryions in sample is higher than the LOD of the kit. **Invalid:** No color shows in Control Line(Line C), indicating the operation is incorrect or the test kit is out of date. In this case, please read the instruction again carefully, and repeat the assay with a new test strip.

Detection Limit

The minimum detection limit of test strips for methylmercury ions is 50 ppb.

Precautions

1. Please use the test strip within the validity period, and restore the test strip and samples to room temperature before use. 2. Please test according to the assay steps. Don't touch the white membrane surface in the center of the test card. Avoid the sunlight when testing. 3. Do not mix consumables such as pipette tips and centrifuge tubes to avoid crosscontamination. 9. The sample should be thoroughly mixed with the reagents in the microwells to avoid foaming. 10. If a positive result is found, the test result needs to be confirmed by legal confirmation method. The test result is only for reference. Please confirm according to the relative standard methods of country. 11. The card is one-off, Please don't use it for twice time. 12. The solution of different batches should not be mixed. 13. Using the gloves when test.
