

QuantiQuik™ L-Glutamate Quick Test Strips

Catalog Number: QQGLUT10

DESCRIPTION

Glutamate is an important chemical in general metabolism. It is also widely used as a flavor enhancer in the food industry. Consumption of foods containing monosodium glutamate (MSG) have been known to cause headaches, flushing, sweating, nausea, and more. Glutamate is also a crucial mammalian neurotransmitter that is believed to be involved in a number of neurological and psychiatric disorders such as lateral sclerosis, autism, and Alzheimer's disease.

BioAssay Systems' QuantiQuik™ L-Glutamate Test Strips are based on Glutamate dehydrogenase catalyzed oxidation of glutamate in which the formed NADH reduces a chromogenic reagent. The intensity of the product color is directly proportional to the glutamate concentration in the sample.

Product Information

Catalog No: QQGLUT10

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

Contents:

- Ten Test Strips
- Ten Sample Development Tubes (400 μ L Development Reagent per tube)
- Instruction Manual

Shipping/Storage: The kit is shipped and stored at room temperature. Keep strips dry and out of direct sunlight.

Expiry: 6 months upon receipt.

Product Accessories

Most samples require either a 5 \times , 21 \times , or 210 \times dilution. These dilutions can be performed either with a pipetteman if available or single use transfer pipettes can be purchased separately. We offer the following:

- Ten 20 μ L Transfer Pipettes (for 21 \times and 210 \times sample dilutions), Cat. No. TP20
- Ten 100 μ L Transfer Pipettes (for 5 \times and 210 \times sample dilutions), Cat. No. TP100
- Ten Sample Dilution Tubes (containing 900 μ L H₂O for 210 \times sample dilutions), Cat. No. DT900

TEST PROCEDURE

Samples: For most instant soups and acidic samples we strongly recommend diluting samples 21 \times . Most soy sauces and fish sauces will require a 210 \times dilution. Milk and samples that are not expected to have very high levels of glutamate should be diluted 5 \times .

1. Unscrew the cap of one of the Sample Development tubes.
2. For samples requiring a 21 \times dilution, use a 20 μ L transfer pipette (a pipetteman can also be used if available), and carefully transfer 20 μ L of sample to the Sample Development Tube. For samples requiring a 5 \times dilution, use a 100 μ L transfer pipette or pipetteman and carefully transfer 100 μ L of sample to the Sample Development Tube. (To use the transfer pipette: Squeeze top bulb of pipette and dip into sample and release bulb to take up sample. Next, place pipette tip into the Sample Development Tube and squeeze bulb again to release sample. *Important:* remove pipette from Sample Development Tube before releasing bulb.)

For samples requiring a 210 \times dilution, first make a 10 \times dilution using a 100 μ L transfer pipette or pipetteman and carefully transfer 100 μ L of sample to a Sample Dilution Tube (Cat. No. DT900) (alternatively, a tube containing 900 μ L of distilled H₂O can be used if available). Replace cap, securely close the vial and invert the vial a couple of times to mix diluted sample. Then, use a 20 μ L transfer pipette or pipetteman and carefully transfer 20 μ L of the above diluted sample to a Sample Development Tube.

3. Replace cap, securely close the vial and invert the vial a couple of times to mix.
4. Unscrew the Sample Development Tube cap and dip in one of the test strips making 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 clinging to strip.
5. Let color develop on strip for 5 minutes.
6. Compare the color of the reaction pad of the strip with the provided Glutamate Chart shown on the test strip bag. Multiply the Concentration on the chart by the dilution used (i.e. 5, 21, or 210).

