

QuantiQuik™ D-Lactic Acid Quick Test Strips

Catalog Number: QQDLAC10

DESCRIPTION

Lactic acid, or lactate, is generated by lactic acid dehydrogenase (LDH) under hypoxic or anaerobic conditions. D-lactic acid is produced in only minor quantities in animals and measuring for D-lactic acid in animal samples is a means to determine the presence of bacterial infection. Furthermore, since D-lactic acid is a specific indicator of bacteria fermentation, its measurement can be used to determine the freshness of milk, meat and fruit juices. Elevated levels of D-lactic acid in wine is an indication of lactic acid bacteria contamination.

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

Product Information

Catalog No: QQDLAC10

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

Contents:

- Ten Test Strips
- Ten Sample Development Tubes (400 µL 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. For long term storage (> 30 days), we recommend keeping the Sample Development Tubes at 4°C or below.

Expiry: 6 months upon receipt.

Product Accessories

Most samples require either a 2×, 5×, or 21× 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 µL Transfer Pipettes (for 21× sample dilutions), Cat. No. TP20
- Ten 100 µL Transfer Pipettes (for 5× sample dilutions), Cat. No. TP100
- Ten 400 µL Transfer Pipettes (for 2× sample dilutions), Cat. No. TP400

TEST PROCEDURE

Samples: For wine samples we strongly recommend that diluting samples 21×. Other acidic samples (fruit juice, beer, etc.) should be diluted 5×. Homogenized milk should be diluted 2×. Other samples such as yogurt require some extra treatment. Please see our website, www.bioassaysys.com, for the treatment instructions for these samples.

1. Unscrew the cap of one of the Sample Development tubes.
2. For samples requiring a 21× dilution, use a 20 µL transfer pipette (a pipetteman can also be used if available), and carefully transfer 20 µL of sample to the Sample Development Tube. For samples requiring a 5× dilution, use a 100 µL transfer pipette and carefully transfer 100 µL of sample to the Sample Development Tube. For samples requiring a 2× dilution, use a 400 µL transfer pipette and carefully transfer 400 µL 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 Development tube and squeeze bulb again to release sample. *Important:* remove pipette from Sample Development Tube before releasing bulb.)
3. Replace cap, securely close the vial and invert the vial a couple of times to mix diluted sample.
4. Unscrew cap and dip in one of the test strips making sure to fully submerge the yellow 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 D-Lactic Acid Chart. Multiply the Concentration in chart by the dilution used (i.e. 2, 5, or 21).