

## QuantiQuik™ L-Lactic Acid Quick Test Strips

Catalog Number: QQLLAC10

### DESCRIPTION

*L-LACTIC ACID*, or L-lactate, is generated by lactate dehydrogenase (LDH) under hypoxic or anaerobic conditions. L-lactic acid is added to many foods and beverages to give it a tart flavor. Increased levels of L-lactic acid in milk, egg, and fruit juices can be an indication of spoilage. In the wine industry, increasing levels of L-lactic acid and the decreasing levels of L-malic acid are monitored (Malolactic fermentation). In this process, the overall acidity of the wine is reduced and can lead to the improvement of the flavor of the wine.

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

### Product Information

Catalog No: QQLLAC10

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 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](http://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 L-Lactic Acid Chart. Multiply the Concentration in the chart by the dilution used (i.e. 2, 5, or 21).