QoolAbs, Inc.
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INSTRUCTIONS

Know Now!® Rapid Tests
Mouse Immunoglobulin Isotyping

Catalog No.	Product
120110-002, 120110-010, 120110-020, 120110-050	Rapid Tests for Mouse IgG1, 2a, 2b Determination, contains 2, 10, 20 or 50 test strips in each pack.
120120-002, 120120-010, 120120-020, 120120-050	Rapid Tests for Mouse IgG3, IgM, IgA Determination, contains 2, 10, 20 or 50 test strips in each pack.
120130-002, 120130-010, 120130-020, 120130-050	Rapid Tests for Mouse κ, λ Light Chain Determination, contains 2, 10, 20 or 50 test strips in each pack.
120230-010	Rapid Tests for Mouse IgG1, 2a, 2b, IgG3, IgM, IgA Determination, contains one of 120110-010 and one of 120120-010.
120360-010	Rapid Tests for Mouse IgG1, 2a, 2b, IgG3, IgM, IgA, κ, λ light Chain Determination, contains one pack of 120110-010, one pack of 120120-010 and one pack of 120130-010

Related Materials (Sold Separately):

Rapid Test Dilution Buffer (Cat # 921001-050): phosphate buffered saline (PBS, pH 7.4) containing 0.1% Triton X100 and 0.1% bovine serum albumin (BSA), 50ml.

Principles of the Procedure

The Know Now! ® Rapid Tests for Mouse Immunoglobulin Isotyping are immunochromatographic membrane assays to determine the monoclonal antibody isotype or subclass. On each test strip, detection antibodies specific to each class/subclass were immobilized on a membrane support as distinct lines: antibodies for IgG1, 2a and 2b were on the 120110 test strips, antibodies for IgG3, IgA, and IgM were on the 121020 test strips, and antibodies for Mouse κ, λ Light Chain were on the 120130 test strips. A capture antibody was labeled with colored particles (colloidal gold nanoparticles) to allow visualization of the immunocomplex formed by the detection antibody, the testing antibody, and the capture antibody. On each of the test strip, a control antibody was immobilized on the control line.

Test Procedure

1. All tests are performed at room temperature. Allow the package of strips warm to room temperature for 15 minutes prior to taking test strips out of the moisture barrier container to avoid condensation.

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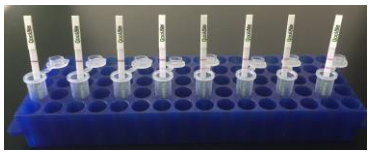
2. Dilute samples containing test antibodies with rapid test dilution dilution buffer. The optimal concentrations of antibodies are 0.02 to 10 ug/ml.

3. Pipette ~200 ul of sample into an Eppendorf tube or ~120 ul into a well of 96-well microtiter plate. Hold the "QoolAbs" logo end of the strip, dip the other end of the strip (with stripped lines) into the sample, making sure only the white pad below the green colored lines is immersed into the sample (Figure A and B).

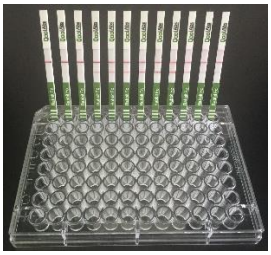
NOTE: The detection range of the test strips is 1ng/ml to 100ug/ml. The test line is most visible for samples with the concentration between 25ng/ml and 10ug/ml. Test samples with high concentrations of testing antibodies may cause hook effect and/or multiple test lines, and should be diluted with the dilution buffer prior to testing. Hook effect refers to reduced signal or false negative due to over-saturation of the reagents in the test strip.

4. 5 to 20 minutes later, read the test result (Figure D, E, and F). Multiple lines may be visible after longer periods of time.

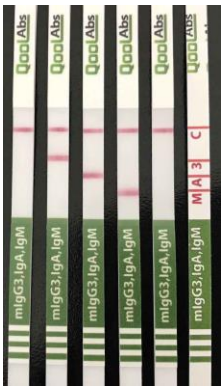
A



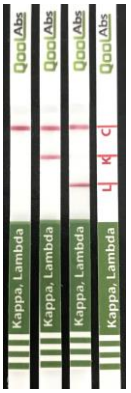
B



C



D



E

Result Interpretation and Troubleshooting:

A reference strip (C) with pre-printed lines is included in each package. After the test, the control line should be clearly visible for a valid test. To determine the test result, align the control line on the test strip to the line marked "C" on the reference card. The test line on the test strip will align to one of the test lines on the reference card, indicating the isotype of the antibody. If multiple test lines appear, dilute the antibody sample to lower than 1ug/ml concentration and redo the test using a new test strip. If there are still multiple test lines appear, the test sample may contain more than one type (subclass) of antibodies. The test strips have no cross reactivity with rabbit or human IgG.

Storage and Stability

Store test strips dry at 4°C. Do not freeze. After opening, unused strips should be stored in a desiccator at 4°C and use within one week. Or, for test strips packed in re-closable aluminum bags, unused strips should be kept in the sealed bag at 4°C with the supplied desiccants and use within one week.