

## PRODUCT DATA SHEET

### Lateral Flow “DIY” Assay Kit

Catalog No. LF-010-10

#### Assay Kit Description

This Lateral Flow Assay Kit can be customized and used for the identification of a variety of analytes. This direct lateral flow test can be used for detection in culture media, cell lysates, and purified protein samples.

Common applications include monitoring expression levels of recombinant antibodies, monoclonal antibodies, and tracking of tagged proteins during purification.

#### Kit Components

- 10 Lateral Flow Dipsticks
- 15 mL Sample Dilution Buffer
- 1.5 mL Lateral Flow Assay Buffer

#### Storage

Store at 2°- 8° C. Stable for at least 3 months if stored as specified.

#### Product Safety and Handling

This product is for R&D use only, not for use in diagnostic procedures. Please review the safety datasheet (SDS) available online for proper safety and handling procedures.

#### Sample Dilution

Assay spotting range: 0.015-20µg/ml of target analyte.

\*Note that although not recommended, the assay can be used to detect samples outside of this concentration range.

If the expected concentration of analyte is known, dilute the sample to be in the range of 0.025 - 5µg/ml using the supplied Sample Dilution Buffer for optimal results.

Below is a suggested concentration gradient for spotting onto the membrane.

1.0 ug/mL	5.0 ug/mL
0.5 ug/mL	2.5 ug/mL
0.0 ug/mL	1.0 ug/mL

If the concentration is unknown, use a starting dilution of 1:1000 for cell culture supernatant samples.

Proper dilution of the sample to the working range of the assay is essential for avoiding false negatives. Testing of multiple dilutions may be required for an unknown sample.

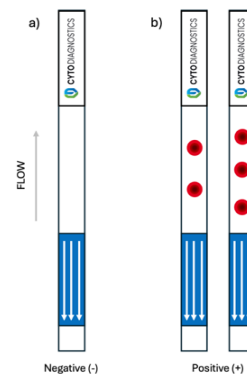
#### Test Procedure

##### Spotting procedure

1. Dilute antibody to desired concentrations.
2. To each stick, spot 1µL of each sample dilution onto the membrane. It is recommended to test 2-3 spots per stick.
3. Allow the samples to dry overnight.

##### Running the direct LFT.

1. Transfer 90µl of Lateral Flow Assay buffer into a well of a microtiter plate.
2. Transfer 10uL of gold conjugate at an OD of 10 into the well. This gold conjugate must be compatible with the antibody spotted onto the membrane above.
3. Pipette to mix well before placing a lateral flow dipstick with the arrows pointing downwards into the sample.
4. Incubate for 15-20 minutes. Do not exceed 25 minutes.
5. Remove the lateral flow dipstick from the well and read test outcome.



**Figure 1.** Possible lateral flow assay test outcomes. The resulting test is either negative (a, no visible spots) or positive (b, spots visible where sample was placed).

**Table I. Reagent Compatibility**

<b>Reagent</b>	<b>Compatible Concentration</b>
NaCl	≤1M
Glycerol	≤ 10%
Triton X-100	≤1%
NP-40	≤ 1%
EDTA	≤ 5mM
SDS	≤ 0.2%