Datasheet: EQU003

**Description:** SLIDE-A-LYZER® DIALYSIS CASSETTE

**Name:** DIALYSIS CASSETTE

**Format:** Kit

**Product Type:** Lab Equipment

**Quantity:** 1 UNITS

### Product Details

#### Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit [www.bio-rad-antibodies.com/protocols](http://www.bio-rad-antibodies.com/protocols).

<table>
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<tr>
<th>Functional Assays</th>
<th>Yes</th>
<th>No</th>
<th>Not Determined</th>
<th>Suggested Dilution</th>
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Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

#### Product Information

**Typical sample volume range:**

0.5ml - 3.0ml

Sample volume range for (NH₄)₂SO₄ containing samples:

0.5ml - 2.5ml

**Molecular Weight**

MW cut-off 10kDa

#### Intended Use

The dialysis cassette acts as a convenient way of dialysing samples. Removal of low molecular weight contaminants, buffer exchange, desalting and concentration can be accomplished with this device. The cassette features a hermetically sealed chamber to maintain the highest possible sample integrity. It has been manufactured under clean room conditions to ensure that the unit is free of contaminants. Sample introduction and removal is easily accomplished by penetrating the silicone gasket with a hypodermic needle attached to a syringe. The silicone imparts re-sealability to the needle puncture, ensuring that no sample is lost from the cassette during dialysis.

#### Instructions For Use

1. Remove the Dialysis Cassette from its protective pouch.

   **Note:** In order to prevent contamination, handle the cassette by the plastic frame, do not touch the membrane with ungloved hands. The cassette can be slipped into the groove of a buoy or a bench top stand.

2. Attach the hub of the hypodermic needle to the Luer-Lok™ fitting of the syringe by firmly screwing it into place.

   **Note:** Do not remove the plastic sheath over the needle until you are ready to fill the syringe with your sample. Use caution when working with the hypodermic needle to avoid injury. The Dialysis Cassette is designed to be used with 18 gauge bevelled, 1 inch needles (21 gauge 1...
inch needles can also be used).

3. Remove the protective sheath from the hypodermic needle and fill the syringe with your sample by first immersing the needle in your sample and then slowly drawing back on the syringe piston.

4. Remove the cassette from the buoy or stand and fill with 0.5-3.0ml of sample (only up to 2.5ml for samples containing (NH₄)₂SO₄). After penetrating the silicone gasket with the needle through one of the syringe ports at the corner of the cassette. Mark the corner of the cassette with a permanent marker.

**Note:** The bevelled portion of the needle should penetrate the silicone gaskets to a minimal extent. Overextending the needle into the cavity can potentially puncture the membrane. If you have a sample with high protein concentration (such as 10mg/ml), fill the cassette slowly to avoid foaming.

5. With the syringe needle still inserted in the cassette cavity draw up on the syringe piston to remove air from the cassette cavity. This will compress the membrane windows so that the sample solution contacts the greatest window surface area.

6. Remove the syringe needle from the cassette while retaining the air in the syringe. The silicone gasket will reseal and the membrane cavity will have no (or minimal) air in direct contact with the sample.

7. Slip the cassette into the stand and float this assembly in the dialysis solution of choice.

8. To remove the sample after dialysis, fill the syringe with 4ml of air and penetrate the silicone gasket with the needle through another of the syringe guide ports at the bottom of the cassette. Discharge the air into the cassette cavity.

**Note:** Do not penetrate the guide ports more than once, since this may lead to coring of the silicone and subsequent loss of the sample.

9. Slowly draw back on the syringe piston to capture the dialyzed sample within the syringe barrel. Remove the syringe needle from the cassette.

When using small volumes i.e. 0.5ml, hydrate cassette before use. Place cassette in bench top stand and immerse cassette in buffer for 30 seconds. Remove cassette from buffer and remove excess liquid by tapping edge of the cassette gently on paper towels. DO NOT BLOT THE MEMBRANE.

<table>
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<tr>
<th>Storage</th>
<th>Store at +18°C to +25°C.</th>
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<tr>
<td>Shelf Life</td>
<td>2 years from date of despatch.</td>
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| Acknowledgements | Luer-Lok is a registered trademark of Becton-Dickinson.  
The Slide-A-Lyzer cassette was developed and manufactured by Pierce Chemical Company. |
| Health And Safety Information | Not required |
| Regulatory   | For research purposes only |