DATASHEET

In-Situ Lithium Dendrite Observation Cell

Two-electrode simulated coin cell with a side sapphire window (>95% transmission) for real-time optical microscopy of lithium dendrite growth at the electrode cross-section.

APPLICATION

Suitable for: optical microscopy of Li cross-sections; pairing with most upright/ stereomicroscopes; glovebox assembly.

KEY SPECS

- Optical Window: Sapphire, >95% Transmission
- Lithium Electrode: 10 × 10 mm
- Electrode Gap: 8 mm
- Conductive Base: High-Purity Titanium

1. Specifications

Optical Window	Sapphire, >95% Transmission
Lithium Electrode	10 × 10 mm
Electrode Gap	8 mm
Conductive Base	High-Purity Titanium
Observation	Dendrite Growth at Li Cross-Section
Method	Optical Microscopy, Real-Time

2. Product Details

The LabCore In-Situ Lithium Dendrite Observation Cell is a two-electrode simulated coin cell built for real-time optical microscopy of lithium dendrite growth.

See dendrites form, live. A side-facing sapphire window (>95% light transmission) exposes the lithium electrode cross-section, so you can watch dendrite initiation and propagation under an optical microscope — through long experiments without clouding.

Uniform pressure, every run. The self-leveling design keeps pressure even across the 10×10 mm lithium electrode, and the high-purity titanium conductive base stays stable and corrosion-resistant cycle after cycle.

Typical applications

- Lithium-metal anode research: dendrite initiation and growth studies
- Electrolyte and additive screening for dendrite suppression
- Teaching demonstrations of lithium dendrite behavior

3. Order / Quote

Model	Pack Size	Availability
LC-B0042-SW-10	1 set: observation cell with sapphire window, high-purity titanium conductive base. Lithium electrode 10×10 mm.	Made to order (quote)
LC-B0043-SW-10-RE	1 set: observation cell with sapphire window, high-purity titanium conductive base, reference electrode. Lithium electrode 10×10 mm.	Made to order (quote)

Current pricing and ordering: labcorematerials.com/products/in-situ-lithium-dendrite-observation-cell/

4. Shipping & Compliance

- Empty hardware, no lithium included. Sapphire window packed with shock-absorbing insert. Not dangerous goods. International express from China.
- Empty hardware, no lithium included. Sapphire window and glass reference electrode packed with shock-absorbing insert. Not dangerous goods. International express from China.

Contact

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www.labcorematerials.com/products/in-situ-lithium-dendrite-observation-cell/