

Materials List for:

# Studying the Supramolecular Organization of Photosynthetic Membranes within Freeze-fractured Leaf Tissues by Cryo-scanning Electron Microscopy

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URL: <https://www.jove.com/video/54066>

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## Materials

Name	Company	Catalog Number	Comments
Ethanol abs	Bio-Lab	052505	
Isopropanol	Bio-Lab	162605	
1-hexadecene	Sigma-Aldrich	H7009	
0.1/0.2 Platelets	Engineering Office M. Wohlwend GmbH, Switzerland	241	Platelets are of 3-mm diameter and 0.5-mm-thick (Type A) with 0.1/0.2-mm-deep cavities (of diameter 2 mm). Similar platelets can be obtained from Leica Microsystems.
High-precision-grade tweezers	Electron Microscopy Sciences	72706-01	Dumont (Switzerland) Durostar style #5 tweezers; Can be substituted with other high-precision tweezers.
High-pressure freezing machine	Bal-Tec	HPM 010	High-pressure freezing alternatives: 1. HPF Compact 02, Wohlwend GmbH; 2. HPM 010, RMC Boeckeler; 3. EM PACT2, Leica Microsystems; 4. EM HPM 100, Leica Microsystems; 5. EM ICE, Leica Microsystems.
Freeze-fracture system	Leica Microsystems	EM BAF 060	
Cryo preparation loading stage	Leica Microsystems	16770228	
Specimen holder for universal freeze fracturing	Leica Microsystems	16LZ04746VN	Clamp holder for specimen carriers of diameter 3 mm
Vacuum cryo-transfer shuttle	Leica Microsystems	EM VCT 100	
Scanning electron microscope	Zeiss	Ultra 055	
Cryo SEM stage	Leica Microsystems	16770299905	
Image acquisition software	SmartSEM, Carl Zeiss Microscopy GmbH		
Image analysis software	Fiji/Image J, National Institute of Health	<a href="http://fiji.sc/Fiji">http://fiji.sc/Fiji</a>	