

Materials List for:

Measuring Spatial and Temporal Ca²⁺ Signals in Arabidopsis Plants

Xiaohong Zhu¹, Aaron Taylor², Shenyu Zhang¹, Dayong Zhang^{1,3}, Ying Feng^{1,4}, Gaimei Liang^{1,5}, Jian-Kang Zhu^{1,6}

¹Department of Horticulture and Landscape Architecture, Purdue University

²Bindley Bioscience Center, Purdue University

³Institute of Biotechnology, Jiangsu Academy of Agricultural Sciences

⁴College of Environmental & Resource Science, Zhejiang University

⁵Dryland Agriculture Research Centre, Shanxi Academy of Agricultural Sciences

⁶Shanghai Center for Plant Stress Biology, Chinese Academy of Sciences

Correspondence to: Xiaohong Zhu at zhu148@purdue.edu

URL: <https://www.jove.com/video/51945>

DOI: [doi:10.3791/51945](https://doi.org/10.3791/51945)

Materials

Name	Company	Catalog Number	Comments
10 cm x 10 cm square Petri dish	VWR	60872-310	
Adhesive film	VWR	60941-062	
Polyethylene tubing	PerkinElmer	9908265	
1 ml syringe	VWR	53548-000	
Silicone grease	Beckman	335148	
2-well chambered cover glass	Nalge Nunc international	155379	
8-well chambered cover glass	Nalge Nunc international	155409	
Luminescence imaging system	Princeton Instruments	N/A	
Inverted confocal laser-scanning microscope	Nikon Instruments Inc.	N/A	Nikon A1R
Imaging software	Nikon Instruments Inc.	N/A	Nikon Elements
DataGraph	Visual Data Tools Inc	N/A	DataGraph 3.1.1 is the newest version
Coelenterazine	NanoLight Technologies	#301B NF-BCTZ-FB	
All purpose bleach	Any local store	N/A	
Triton X-100	Fisher	BP151500	
MS salt	Phytotechnology Labs	M524-50L	
Sucrose	VWR	BDH8029-12KG	
Agar	Sigma	A1296-5KG	
Phytigel	Sigma	P8169-1KG	