

Materials List for:

Optogenetic Random Mutagenesis Using Histone-miniSOG in *C. elegans*

Kentaro Noma¹, Yishi Jin^{1,2}

¹Division of Biological Sciences, Section of Neurobiology, University of California in San Diego and Howard Hughes Medical Institute

²Department of Cellular and Molecular Medicine, University of California in San Diego School of Medicine and Howard Hughes Medical Institute

Correspondence to: Kentaro Noma at knoma@ucsd.edu, Yishi Jin at yijin@ucsd.edu

URL: <https://www.jove.com/video/54810>

DOI: [doi:10.3791/54810](https://doi.org/10.3791/54810)

Materials

Name	Company	Catalog Number	Comments
Ultra High Power LED light source	Prizmatix	UHP-mic-LED-460	460 ± 5 nm
LED controller	Prizmatix	UHPLCC-01	
Digital function generator/amplifier	PASCO	PI-9587C	PI-9587C is no longer available. The replacement is PI-8127.
BNC cable male/male	THORLABS	CA3136	
USB-TTL interface	Prizmatix		Optional
Photometer	THORLABS	PM50 and Model D10MM	
Filter paper	Whatman	1001-110	
Stereomicroscope	Leica	MZ95	
NGM plate			Dissolve 5 g NaCl, 2.5 g Peptone, 20 g Agar, 10 µg/mL cholesterol in 1 L H ₂ O. After autoclaving, add 1 mM CaCl ₂ , 1 mM MgSO ₄ , 25 mM KH ₂ PO ₄ (pH 6.0).
Lysis solution			10 mM Tris(pH 8.8), 50 mM KCl, 0.1% Triton X-100, 2.5 mM MgCl ₂ , 100 µg/mL Proteinase K