

Materials List for

Rapid Isolation of Stage I Oocytes in Zebrafish Devoid of Granulosa Cells

Qianwen Zheng¹, Xiaolong Xie¹, Yao Li¹, Chengbo Ai¹, Siyu Pu¹, Jing Chen¹

¹Department of Pediatric Surgery and Laboratory of Pediatric Surgery, West China Hospital / West China School of Medicine, Sichuan University

Corresponding Author	Citation		
Jing Chen	Zheng, Q., Xie, X., Li, Y., Ai, C., Pu, S., Chen, J. Rapid Isolation of Stage I Oocytes in		
jingchen@scu.edu.cn	Zebrafish Devoid of Granulosa Cells. J. Vis. Exp. (209), e66458, doi:10.3791/66458 (2024)		
Date Published	DOI	URL	
July 26, 2024	10.3791/66458	jove.com/video/66458	

Materials

Name	Company	Catalog Number	Comments
Kinger's cell dissociation solution	PlantChemMed	PC-33689	Kinger's cell dissociation solution can be stored stably at -20 °C after packaging and can be used after thawing at low temperature (4 °C). It can be used directly for dissociating zebrafish ovaries. The optimal temperature is 28.5 °C, for approximately 2-3 hours. The duration can be adjusted according to the specific dissociation conditions, either shortened or extended (https://www.plantchemmed.com/chanpin?productNo=PC-33689).
Cell strainers (100 μm)	Falcon	352360	
Fluorescence microscope	Zeiss	Axio Zoom.V16	
Forceps	Dumont	#5	
Glass capillary needle	1	/	Blunted by burning with lighter
Hoechst	Yesen	40732ES03	
Low adsorption pipette tips (10 µl)	Labsellect	T-0010-LR-R-S	
Leibovitz's L-15 medium medium (with L-glutamine)	Hyclone	SH30525.01	
Ice bucket	l l	/	Ice-cold water is used to euthanize zebrafish
Incubator	WIGGENS	WH-01	
Juvenile fish	/	/	5–6 weeks post-fertilization, standard length [SL] of 10–15 mm
Plastic dish (35 mm)	SORFA	230101	
Stereomicroscope	Motic	SMZ-161	
Tissue Culture Plate (6-wells)	SORFA	0110006	
Vannas spring scissors	Fine Science Toosl	#15000-00	