

Materials List for:

# Analysis of Beta-cell Function Using Single-cell Resolution Calcium Imaging in Zebrafish Islets

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URL: <https://www.jove.com/video/57851>

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## Materials

Name	Company	Catalog Number	Comments
Transgenic Zebrafish line: Tg( <i>ins:nls-Renilla-mKO2</i> ; <i>cryaa:CFP</i> ); Tg( <i>ins:GCaMP6s</i> ; <i>cryaa:mCherry</i> )			By request from authors
Stereo microscope	ZEISS	495015-0001-000	SteREO Discovery.V8
Fluorescence lamp	ZEISS	423013-9010-000	Illuminator HXP 120 V
Red Filter Cube	ZEISS	000000-1114-462	Filter set 45 HQ TexasRed
Confocal Microscope	ZEISS	LSM 780	
Bovine fibrinogen	Sigma	F8630	
HBSS (Hanks' Balanced Salt solution)	ThermoFisher	14025092	
Thrombin	Sigma	T4648	
D-Glucose	Sigma	G8270	
KCl	Sigma	P9333	
35 mm diameter glass-bottom dishes	ThermoFisher	150680	
tricaine methane sulfonate	Sigma	E10521	
Fine Forceps	Fine Science Tools	11445-12	
FIJI, using ImageJ Version: 2.0.0-rc-43/1.50e			<a href="https://fiji.sc/">https://fiji.sc/</a>
R, version 3.2.4			<a href="https://www.r-project.org/">https://www.r-project.org/</a>
RStudio			<a href="https://www.rstudio.com/">https://www.rstudio.com/</a>
plotcelltrace.R			A custom script provided with the manuscript