

Materials List for

# Combined In Vivo Anatomical and Functional Tracing of Ventral Tegmental Area Glutamate Terminals in the Hippocampus

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## Citation

Shrestha, A., Adeniyi, P.A., Ogundele, O.M. Combined In Vivo Anatomical and Functional Tracing of Ventral Tegmental Area Glutamate Terminals in the Hippocampus. *J. Vis. Exp.* (), e61282, doi:10.3791/61282 (2020).

## Date Published

September 9, 2020

## DOI

10.3791/61282

## URL

jove.com/video/61282

## Materials

Name	Company	Catalog Number	Comments
3% Hydrogen peroxide	Fisher chemical	H312	
AAV-CaMKII $\alpha$ -ChR2-eGYP	Addgene	Plasmid #26969	
BNC cable	Amazon		
BNC Splitter	Amazon		
Ceramic Split Mating Sleeve for $\varnothing$ 1.25mm Ferrules.	Thorlabs	ADAL1-5	
Drill	Dremel	LR 39098	
Gelatin coated slides	Fisher scientific	OBSLD01CS	
Hamilton's syringe (Neuros)	WPI Inc.	06H	
Head stage adapter	Neuronexus	Adpt-Q4-OM32	
High impedance silicon probe	Neuronexus	Q1x1-tet-5mm-121-CQ4	
INTAN 512ch Recording Controller	INTAN	RHD2000	
Iodine solution	Dynarex	1425	
Isoflurane	Piramal	NDC 66794-017-25	
Ketamine	Spectrum	K1068	
LED Driver	Thorlabs	LEDD1B	
LED light source (470 nm)-blue light	Thorlabs	M470F3	
Micromanipulator	Narishige	M0-203	
Optic fiber	Thorlabs	CFMLC14L05	
Pan head philips screw (M0.6 X 2mm)	Amazon	M0.6 X 2mm	
Pre-amplifier headstage (32 Channel)	INTAN	C3314	
Stereotaxic frame	Kopf	1530	
TTL pulser	Prizmatix	4031	
Urethane	Sigma	U2500	
Xylazine	Alfa Aesar	J61430	

Software	Company	Version	
Graphpad Prism	GraphPad Software	version 8	
Intan Recording Controller	Intantech	version 2.07	
Neuroexplorer	Nex Technologies	version 5.215	
Plexon Offline Spike Sorter	Plexon Inc	version 4.5	
<b>ACSF Composition:</b>			
oxygenated ACSF with 95% Oxygen/5%CO <sub>2</sub> constantly being bubbled through the ACSF (ACSF; in mM 125 NaCl, 25 NaHCO <sub>3</sub> , 3 KCl, 1.25 NaH <sub>2</sub> PO <sub>4</sub> , 1 MgCl <sub>2</sub> , 2 CaCl <sub>2</sub> and 25 Glucose).			