

Materials List for:

# An Invasive Method for the Activation of the Mouse Dentate Gyrus by High-frequency Stimulation

Zhe Zhao<sup>1</sup>, Haitao Wu<sup>1,2</sup>

<sup>1</sup>Department of Neurobiology, Beijing Institute of Basic Medical Sciences

<sup>2</sup>Key Laboratory of Neuroregeneration, Co-innovation Center of Neuroregeneration, Nantong University

Correspondence to: Haitao Wu at [wuht@bmi.ac.cn](mailto:wuht@bmi.ac.cn)

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## Materials

| Name                                   | Company                       | Catalog Number             | Comments                                         |
|----------------------------------------|-------------------------------|----------------------------|--------------------------------------------------|
| Brain stereotaxic instrument           | Stoelting                     | 51730D                     | Stereotactic intracranial implantation for mouse |
| Stimulator                             | A-M systems                   | Model 3800                 | MultiStim 8-Channel programmable stimulator      |
| Dental driller                         | Saeshin Precision Co., Ltd    | STRONG 90                  | For drilling and craniotomy                      |
| Burr                                   | Meisinger                     | HM1 005#                   | For drilling and craniotomy                      |
| Digidata 1550 Digitizer                | Molecular Devices             | AXON 1550                  | High-resolution data acquisition                 |
| Cryotome                               | Thermo Fisher Scientific      | Thermo Cryotome FSE        | Cutting frozen sections of specimens             |
| Confocal microscope                    | Olympus                       | FV-1200                    | Japan, with 20x Objective (NA 0.45)              |
| Mouse surgery tools                    | F.S.T.                        | 14084-08,11254-20,16109-14 | Scissors, forceps, bone cutter, holders etc.     |
| Pentobarbital sodium                   | R&D systems                   | 4579                       | 20-50mg/kg for i.p. injection                    |
| Penicillin G                           | Sigma-Aldrich                 | P3032                      | 75,000 U for i.m. injection                      |
| Carprofen                              | Sigma-Aldrich                 | SML1713                    | 5-10mg/kg, for s.c. injection                    |
| 4% Paraformaldehyde (PFA)              | Beijing Solarbio Sci-Tech Co. | P1110                      | stocking solution for tissue fixation            |
| Phosphate buffer (PBS)                 | Invitrogen                    | 10010023                   | pH7.4, 500ml in stocking                         |
| Tissue-Tek O.C.T. compound             | Sakura                        | 4583                       | Formulation of water-soluble glycols and resins  |
| anti-BrdU antibody                     | Abcam                         | ab6326                     | Dilutions:1/800                                  |
| anti-c-fos antibody                    | Abcam                         | ab209794                   | Dilutions:1/500                                  |
| Goat Anti-Rabbit IgG (Alexa Fluor 568) | Thermo Fisher Scientific      | A11036                     | Dilutions:1/500                                  |
| Donkey Anti-Rat IgG (Alexa Fluor 488)  | Jackson ImmunoResearch        | 712-546-150                | Dilutions:1/500                                  |
| Antifade mounting medium with DAPI     | Vector Laboratories           | H-1200                     | Counterstaining with DAPI                        |
| anti-Notch1 antibody (C-20)            | Santa Cruz Biotech            | sc-6014                    | Dilutions:1/50                                   |
| Donkey Anti-Goat IgG (Alexa Fluor 488) | Abcam                         | ab150073                   | Dilutions:1/1000                                 |