

Materials List for:

Evaluation of Synapse Density in Hippocampal Rodent Brain Slices

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Materials

Name	Company	Catalog Number	Comments
Vibratome	Leica	VT1000S	
Primary antibody	Millipore	AB5905	vGlut1 (1:2000)
Primary antibody	Thermo Scientific	MA1-046	PSD-95 (1:500)
Primary antibody	Synaptic Systems	131 004	vGAT (1:500)
Primary antibody	Synaptic Systems	147011	Gephyrin (1:500)
Primary antibody	Abcam	ab5392	MAP2 (1:10000)
Secondary antibody	Jackson Laboratories	706-545-148	Donkey Anti-Guinea Pig Alexa Fluor 488 (1:600)
Secondary antibody	Abcam	ab175470	Donkey Anti-Rabbit Alexa Fluor 568 (1:600)
Mounting medium	SouthernBiotech	00-4958-02	Fluoromount-G
Confocal Microscope	Olympus	NA	FV1000 confocal microscope using a 60x 1.35 numerical aperture (NA) oil objective. For vGlut1, use a 488 laser with a percentage power of 14%. For PSD-95 use a 559 laser with a percentage power of 20%.
Analysis software	PerkinElmer	NA	Volocity
Scalpel	Swann-Morton	203	No 11
Super Glue	Loctite	1446875	
95% O ₂ , 5% CO ₂	BOC	NA	Cylinder
24-well plate	Corning	3524	
Glass slides	Thermo	7107	08-1.0mm thick
Petri Dish	Corning	430167	
iDkk1 mice	N/A	N/A	Mice were obtained by crossing tetO Dkk1 transgenic mice with CaMKII α rtTA2 transgenic mice. TetO Dkk1 transgenic mice and CaMKII α rtTA2 were crossed in a heterozygous state. Both mouse lines were bred in a C57BL/6J background. Single transgenic and WT littermate were used as controls.
Name	Company	Catalog Number	Comments
Reagents for solutions:			
NaCl	Sigma	V800372	
KCl	Sigma	P9333	
Na ₂ HPO ₄	Sigma	255793	

KH ₂ PO ₄	Sigma	P9791	
Ca ₂ Cl	Sigma	223506	
Mg ₂ Cl	Sigma	M9272	
NaH ₂ PO ₄	Sigma	71505	
Kynurenic acid	Sigma	K3375	
NaHCO ₃	Sigma	S5761	
Pyruvic acid	Sigma	107360	
EDTA	Sigma	E6758	
D-Glucose	Sigma	G5767	
Sucrose	Sigma	S8501	
Triton-X	Sigma	T8787	
Donkey Serum	Millipore	S30-100ml	
PFA	Sigma	P6148	