

I) Annexes

1) Buffers and solutions

1.1) *Primary culture of hippocampal neurons*

1.1.1. PBS 1X

Compound	Concentration
NaCl	13,7 mM
KCl	0,268 mM
KH ₂ PO ₄	0,15 mM
Na ₂ HPO ₄	0,8 mM

1.1.2. Poly-L-Lysine for plate coating

Compound/solution	Quantity
L-Lysine	100 µg
PBS 1X	10 mL

1.1.3. Calcium- and magnesium-free Hank's balanced salts solution (CMF-HBSS)

Compound/solution	Concentration
KCl	5,33 mM
KH ₂ PO ₄	0,441 mM
NaHCO ₃	4,17 mM
NaCl	137,93 mM
Na ₂ HPO ₄	0,338 mM
D-Glucose	5,56 mM
HEPES	10 mM

1.1.4. Neuronal plating medium (NPM)

For 100 mL :

Compound/solution	Quantity
MEM with Earle's salts	89 mL
Glutamine 200 mM	1 mL
D-Glucose	0,6 g
Foetal bovine serum	5 mL

1.1.5. Neurobasal supplemented with B27 and glutamine

For 100 mL :

Solution	Quantity
Neurobasal	97,4 mL
B27 (from Invitrogen)	2 mL
Glutamine 200 mM	250 µL
Pen-Strep	100 µL

1.2) *Quantitative polymerase chain reaction (qPCR)*

1.2.1. iQ SYBR Green Supermix (Biorad)

Compound	Concentration
KCl	10 mM
Tris-HCl	40 mM
dATP	0,4 mM
dCTP	0,4 mM
dGTP	0,4 mM

1.3) Western Blot analysis

1.3.1) BCA protein assay reaction mix

Compound	Concentration
Reagent A (Pierce BCA Protein Assay Kit)	98%
Reagent B (Pierce BCA Protein Assay Kit)	2%

1.3.2) Lysis buffer LAEMMLI 2X

Compound	Concentration
SDS (sodium-dodecyl sulfate)	4%
Glycerol	20%
Tris HCl (trisaminomethane)	125 mM

1.3.3) Loading buffer LAEMMLI 2X

Compound	Concentration
SDS	4%
Glycerol	20%
Tris HCl	125 mM
Bromophenol blue	0,004%
2-mercaptoethanol	10%

1.3.4) MES/SDS migration buffer 20X (Invitrogen)

Compound	Concentration
Tris	1 M
MES 2-(<i>N</i> -morpholino) ethanesulfonic acid	1 M
SDS	69,3 mM
EDTA (ethylenediaminetetraacetic acid)	20,5 mM

1.3.5) NuPAGE transfer buffer 20X (Invitrogen)

Compound	Concentration
Bicine	500 mM
Bis-Tris	500 mM
EDTA	20,5 mM

1.3.6) Ponceau red

Compound	Concentration
Ponceau S	0,1% (w/v)
Acetic acid	5%

2) PCR primers (rat)

Primer (Sigma-Aldrich)		Sequence (5'-3')	Length (bp)
Gria1 (GluA1)	Forward	CGACATCCAGAGAGCCCT	18
	Reverse	CAGTAGCCCTCATAGCGG	18
Grin2A (GluN2A)	Forward	CAACGAAGGGATGAATGTG	19
	Reverse	AACGCTCCTCATTGATGG	18
Grin2B (GluN2B)	Forward	CTCTGGCTCACTGGCATT	18
	Reverse	GGGGAGTTCATCACGGA	17
Abca1	Forward	TGATTTCTGTCCGCCTGAGC	20
	Reverse	ATGTCCCTAATGCTGGTGTC	20
Gapdh	Forward	CATGGCCTTCCGTGTTCTTA	20
	Reverse	GCGGCACGTCAGATCCA	17