LIST OF ABBREVIATIONS

List of Abbreviations

3´ UTR	3´ Untranslated Region
A2B5	Cell surface ganglioside marker of Oligodendrocytes
AKT	Serine-threonine protein kinase
ATRX	ATP-dependent helicase
BDNF	Brain-Derived Neurotrophic Factor
BMP4	Bone Morphogenetic Protein 4
BSA	Bovine Serum Albumin
C6 cell line	Glioma cell line
CamKII	Ca -Calmodulin-dependent Protein Kinase II
CBP	CREB-Binding Protein
CER I	Cytoplasmic Extraction Reagent I
CER II	Cytoplasmic Extraction Reagent II
CFA	Complete Freund's Adjuvant
CNPase	2´,3´-Cyclic-nucleotide3´-phospho diesterase
CoREST	co RE-1 Silencing Transcription factor
CREB1	cAMP Responsive Element Binding protein 1
CTD	Carboxyl Terminal Domain
DAPI	4',6-Diamidino-2-phenylindole
DFG	DMEM + 10% FBS Complete Media
DGCR8	DiGeorge Critical region 8
Dlx5	Distal-Less Homeobox 5
Dlx6	Distal-Less Homeobox 6
DMEM	Dulbecco's Modified Eagle's medium
DMSO	Dimethyl sulfoxide
DRG8	Dorsal root ganglion E8
ECL	Enhance chemiluminescence
ECM	Extra Cellular Matrix
EDTA	Ethylenediaminetetraacetic acid
EGF	Epidermal Growth Factor
Egr-1	Early growth response protein 1

EGTA	Egtazic acid
ERK1/2	Extracellular Signal-Regulated Kinase1/2
FBS	Fetal Bovine Serum
FGF	Fibroblast Growth Factor
FN	Fibronectin
GalC	Galactosylceramidase
GAPDH	Glyceraldehyde-3-phosphate dehydrogenase
GAT-1	GABA transporter 1
GFAP	Glial Fibrillary Acidic Protein
HBSS	Hank's balanced salt solution
HCl	Hydrochloric acid
HDACs	Histone deacetylases
HIPK2	Homeodomain-Interacting Protein Kinase 2
HMG	High Mobility Group protein
HP1	Heterochromatin Protein 1
IB	Immunoblot
ID	Intervening Domain
IL-1β	Interleukin-1 beta
IL-6	Interleukin-6
IP	Immunoprecipitation
KCL	Potassium chloride
KN93	Ca2+/calmodulin-dependent protein kinase II inhibitor
LANA	Latency-Associated Nuclear Antigen
LN	Laminin
LPS	Lipoploysaccharide
LY290042	Inhibior of PI3K
MAG	Myelin Associated Glycoprotein
MBD	Methylated DNA-Binding Domain
MBP	Myelin Basic Protein
MeCP2	Methyl -CpG binding protein 2
MOG	Myelin Oligodendrocyte Glycoprotein
mTOR	mammalian Target Of Rapamycin
N19	Oligodendrocyte cell lines

NaCl	Sodium Chloride
NCoR	Nuclear receptor co-represssor
NER	Nuclear Extraction Reagent
NG2	Neuron-glial antigen 2
NGF	Nerve Growth Factor
NLS	Nuclear Localization Sequence or Signal
NMDA	N-Methyl-D-aspartic acid
NP-40	Nonyl phenoxypolyethoxyethanol-40
NPCs	Neural Progenitor Cells
NT3	Neurotrphin-3
NT4	Neurotrphin-3
NTD	N-Terminal Domain
O4	Immature Oligodendrocyte Marker
OLGs	Oligodendrocyes
Olig1/2	Oligodendrocyte transcription factor 1 or 2
OPCs	Oligodendrocyte Progenitor Cells
PBS	Phosphate-Buffered Saline
PBS-T	Phosphate-Buffered Saline-Tween
PC12	Neuron-like cell line
PDGF-AA	Platelet Dervied Growth Factor-AA
PDGFRα	Platelet-Derived Growth Factor Receptor alpha
PDR	Proliferative Diabetic Retinopathy
pERK1/2	Phosphorylated ERK1/2
PI3K	Phosphatidylinositol-4,5-biphosphate 3-kinase
PIAS1	Protein Inhibitor of Activated STAT 1
pMeCP2	phosphorylated MeCP2
PPTase	Alkaline phosphatase
PTMs	Post Translational Modifications
Rab3d	Ras-related protein is the member of RAS oncogen family
RIPA buffer	Radioimmunoprecipitation assay buffer
RTT	Rett Syndrome
S100B	Calcium binding protein B

SCW	Sonication buffer
SDS-PAGE	Sodium Dodecyl Sulfate- Poly Acrylamide Gel Electrophoresis
SHSY5Y	Human neuroblastoma cell line
Sox10	SRY-related HMG-box 10 protein
TBS-T	Tris-buffered saline,0.1%Tween
TFIIB	Transcription Factor IIB
TNF-α	Tumor Necrosis Factor-alpha
TRD	Transcription Repression Domain
TrkB	Tropomyosin receptor kinase B receptor
TrkBT1	Truncated form of TrkB
UO126	Inhibior of ERK1/2
Vamp3	Vesicle associated membrane protein 3
VEGF	Vascular Endothelial Growth Factor
Y120	Tyrosine 120
Y120D	Tyrosine 120 Aspartate
YB1	Y-Box transcription factor 1
Zif268	Zinc finger protein 268
α6β1	alpha 6 beta 1 intigrin