

Engineering glomerular podocyte's progenitor and mature podocyte

Supplementary Table 1. The List of Acronyms and the Nomenclature of Small Molecules

Acronyms	
All	Angiotensin II
AA	Activin A
AA	Allylamine
AAT	Aspartate transaminase
ACTA2	Actin, alpha 2, smooth muscle, aorta
ACTN4	Actinin alpha 4
AD-MSC	Adipose mesenchymal stem cells
AFP	Alpha-fetoprotein
AKT	Akt/Protein kinase B
ALB	Albumin
cAMP	Cyclic adenosine monophosphate
APEL MEDIA	Animal product-free medium
AQP1	Aquaporin 1
AQP2	Aquaporin 2
AQP2	Aquaporin 3
Arp2	Actin-related protein 2
Arp3	Actin-related protein 3
Atf2	Activating transcription factor 2
ATRA	All trans retinoic acid
BM-MSC	Bone marrow mesenchymal stem cells
BMP2	Bone morphogenic protein 2
BMP3	Bone morphogenic protein 3
BMP4	Bone morphogenic protein 4
BMP5	Bone morphogenic protein 5
BMP6	Bone morphogenic protein 6
BMP7	Bone morphogenic protein 7
BSA	Bovine serum albumin
CALB1	Calbindin 1
CatL	Cathepsin L
CCG1423	N-[2-[(4-Chlorophenyl)amino]-1-methyl-2-oxoethoxy]-3,5-bis(trifluoromethyl)benzamide
CD2AP	CD2-associated protein
CDH	Cadherins
CNN	Calponin
CD13	Cluster of differentiation 13
CDH16	Cadherin 16/kidney specific protein (Ksp)
CD24	Cluster of differentiation 24
CD31	Cluster of differentiation 31
CD133	Cluster of differentiation 133
Cdc42	Cell division control protein 42 homolog
CG	Collapsing glomerulopathy
ChIP	Chromatin immunoprecipitation
ChIP-Seq	Chromatin immunoprecipitation-sequencing
CHIR99021	6-[[2-[[[4-(2,4-Dichlorophenyl)-5-(5-methyl-1H-imidazol-2-yl)-2-pyrimidinyl]amino]ethyl]amino]-3-pyridinecarbonitrile
CITED1	Cbp/P300 Interacting transactivator with Glu/Asp rich carboxy-terminal domain 1
C-Jun	Transcription factor activator protein 1 (AP-1)/Jun proto-oncogene
CK8	Cytokeratin 8
CKD	Chronic kidney disease
CLIC5	Chloride intracellular channel 5
c-MYC	c-myc protein
COL1A1	Collagen, type I, alpha 1
CP21R7	3-(3-aminophenyl)-4-(1-methyl-1H-indol-3-yl)-1H-pyrrole-2,5-dione
CRABP2	Cellular retinoic acid binding protein 2
CREB	cAMP-response element binding protein
CRYM	Crystallin, mutated

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DB	Dolichos biflorus
DBDs	DNA binding domains
DII	Delta-like
DMEM	Dulbecco's Modified Eagle Medium
DMEM/F:12	Dulbecco's Modified Eagle Medium: Nutrient Mixture F-12
DNA	Deoxyribonucleic acid
DNase I	Deoxyribonuclease I
DNase-Seq	DNase I hypersensitive sites sequencing
DNMT3b	DNA (cytosine-5-)-methyltransferase 3 beta
Dpc	Days post coitum
DynaMo	Dynamic motif occupancy analysis
EBSs	Embroid bodies
E-CDH	Epithelial cadherin [CDH1-cadherin 1, type 1, E-cadherin (epithelial)]
ECM	Extracellular matrix
EdU	5-Ethynyl-2'-deoxyuridine
EGF	Epidermal growth factor
ELF1	E74-like factor 1 (ets domain transcription factor)
EMX2	Empty spiracles homeobox 2
EMT	Epithelial to mesenchymal
EOMES	Eomesodermin
ESCs	Embryonic stem cells
Ets1	Transcription factor/avian erythroblastosis virus E26 (V-Ets) oncogene homolog-1
EYA1	Eyes absent (Drosophila) homolog 1
FACS	Fluorescence-activated cell sorting
FAT-1	Protein fat homolog/cadherin-related family member 8
F-Actin	Filamentous actin
FBS	Fetal bovine serum
FCS	Fetal calf serum
FcRn	Neonatal Fc receptor
FGF1	Fibroblast growth factor 1
FGF2	Fibroblast growth factor 2
FGF7	Fibroblast growth factor 7
FGF9	Fibroblast growth factor 9
FGF10	Fibroblast growth factor 10
FGFR	Fibroblast growth factor receptor
FIT-C	Fluorescein isothiocyanate
Flk1	Fetal liver kinase 1
FOXA2	Forkhead box A2
FOXD1	Forkhead box D1
FOXF1	Forkhead box F1
FSGS	Focal segmental glomerulosclerosis
GABRB3	Gamma-aminobutyric acid (GABA) A receptor, beta 3
GATA3	GATA binding protein 3
GBM	Glomerular basement membrane
GDF3	Growth differentiation factor 3
GDNF	Glial cell derived neurotrophic factor
GFB	Glomerular filtration barrier
GFP	Green fluorescent protein
GFRA1	GDNF family receptor alpha 1
GGT1	Gamma-glutamyltransferase 1
GLEPP1	Glomerular epithelial protein 1
GPCRs	G-protein coupled receptors
GSK3 β 1	Glycogen synthase kinase 3 beta 1
hAD-MSCs	Human adipose derived mesenchymal stem cells
HC	Histochemistry
HDAC	Histone deacetylase

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Hes	Hairy enhancer of split
hES	Human embryonic stem cells
Hey	Hes related repressor proteins
HMGA2	High mobility group AT-hook 2
HNA	Human nuclear antigen
HOXB7	Homeo box B7
HOXD11	Homeobox D11
HOXA11	Homeobox DA11
HPRT	Hypoxanthine phosphoribosyltransferase 1
HSCs	Hematopoietic stem cells
HuMt	Human mitochondria
HuNu	Human nuclei antigen
ICC	Immunocytochemistry
IgA	Immunoglobulin A
IGF1	Insulin-like growth factor 1
IGF-R	Insulin-like growth factor 1 receptor
IHC	Immunohistochemistry
IM	Intermediate mesoderm
IMF	Immunofluorescence
iNP	Induced nephron progenitor
iPSCs	Induced pluripotent stem cells
JAG1	Jagged 1
Ki-67	Proliferation-related Ki-67 antigen
KLF15	Kruppel like factor 15
KRT18	Cytokeratin 18
KSCs	Kidney derived stem cells
LHX1	LIM homeobox protein 1
LIF	Leukemia inhibitory factor
LIM1	LIM homeobox 1 (LHX1)
LY294002	2-(4-Morpholinyl)-8-phenyl-1(4H)-benzopyran-4-one hydrochloride
MAFB	Kreisler (Mouse) Maf-related leucine zipper homolog
MAP2	Microtubule-associated protein 2
MCN	Minimal change disease
ME	Mesoderm
MEOX2	Mesenchyme homeobox 2
mES	Mouse embryonic stem cells
MET	Mesenchymal to epithelial transition
mi-RNA	Micro ribonucleic acid
MIXL1	Mix paired-like homeobox
MM	Metanephric mesenchyme
MPP5	Membrane protein palmitoylated 5
MYC	Myelocytomatosis oncogene
mTG	Microbial transglutaminase
MUCIN1	Mucin 1, cell surface associated
MYH11	Myosin heavy chain 11
NANOG	Nanog homeobox
NCAM	Neural cell adhesion molecule 1
N-CDH	N-cadherin
NCK1	Non-catalytic region of tyrosine kinase adaptor protein 1
NCK2	Non-catalytic region of tyrosine kinase adaptor protein 2
NEAA	Non-essential amino acid
NES	Nestin
NICD	Notch intracellular domain
NKX2.5	NK2 transcription factor related, locus 5
NMYC/MYCN	MYCN Proto-oncogene, BHLH transcription factor
NP	Nephron progenitor

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NPCs	Nephron progenitor cells
NPHS1	Nephrin
NPHS2	Podocin
NTNG1	Netrin G1
OCT4/POU5F1	Octamer-binding transcription factor 4/POU class 5 homeobox 1
OD	Octadiene
OSR1	Odd-skipped related 1
P	Passage
P27	IFI27 (interferon, alpha-inducible protein 27)
P57	Cyclin-dependent kinase inhibitor 1C
P85	PI3K regulatory subunit alpha
aPKC-PAR3-PAR6	Atypical protein kinase C-partitioning defective 3 homolog-partitioning defective 6 homolog complex
PAX2	Paired box 2
PAX6	Paired box 6
PAX8	Paired box 8
PCR	Polymerase chain reaction
P-CDH	Podocyte cadherin
PECAM1	Platelet and endothelial cell adhesion molecule 1
PenStrep	Penicillin Streptomycin
PFMS	Position frequency matrices
PI3Ks	Phosphoinositide 3-kinases
PIQ	Protein interaction quantitation
PKA	Protein kinase A
PKB	Protein kinase B/Akt
PKC λ /I	Protein kinase C lambda/iota
PNA	Peanut agglutinin
POD1	Podocyte expressed 1
PODXL	Podocalyxin-like protein 1
PS	Primitive streak
PSEN	Presenilin
qRT-PCR	Quantitative real time polymerase chain reaction
RA	Retinoic acid
Rac1	Rac family small GTPase 1
RAF1	v-raf-1 murine leukemia viral oncogene homolog 1
RBP-J	Recombination signal binding protein for immunoglobulin kappa J region
RET	Rearranged during transfection
RFP	Red fluorescent protein
RHO/ROCK	Rho-associated coiled-coil forming protein serine/threonine kinase
RPMI-1640	Roswell Park Memorial Institute (RPMI) 1640
RRT	Renal replacement therapy
RSAD2	Radical S-adenosyl methionine domain-containing protein 2
RTKs	Receptor tyrosine kinases
RUNX2	Runt-related transcription factor 2
SALL1	Spalt like transcription factor 1
SD	Slit diaphragm
SEM	Scanning electron microscope
SIX2	Sine oculis homeobox homolog 1
SIX2	Sine oculis homeobox homolog 2
SLC12A3	Solute carrier family 12 member 3
SLC3A1	Solute carrier family 3 member 1
Slug	Snail family transcriptional repressor 2/SNAI2
SULT1B1	Sulfotransferase family 1B member 1
α -SMA	Alpha smooth muscle actin
SNAI1	Snail family transcriptional repressor 1
SNAI2	Snail family transcriptional repressor 2
SOX1	SRY-Box 1/SRY (sex determining region Y)-box 1

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SOX2	SRY-Box 2/SRY (sex determining region Y)-box 2
SOX3	SRY-Box 3/SRY (sex determining region Y)-box 3
SOX17	SRY-Box 17/SRY (sex determining region Y)-box 17
SSEA4	Stage-specific embryonic antigen-4
SULT1B1	Sulfotransferase family 1B member 1
SYNPO	Synaptopodin
T	T-box proteins (Brachyury)
TBX6	T-box 6
TCF	T cell factor
TDGF1	Teratocarcinoma-derived growth factor 1
TEM	Transmission electron microscope
TFBs	Transcription factor binding sites
TFs	Transcription factors
TGFB1	Transforming growth factor, beta 1
TGFB2	Transforming growth factor, beta 2
TIE2	Tyrosine kinase with Ig and EGF homology domains-2
TJP1	Tight junction protein 1
TRA1-1-61	Tumour-related antigen [TRA]-1-60
TRA-1-81	Tumour-related antigen [TRA]-1-81
TRPC5	Transient receptor potential cation channel subfamily C member 5
TRPC6	Transient receptor potential cation channel subfamily C member 6
TUJ1	Neuron-specific class III β -tubulin
UB	Ureteric bud
UE	Ureteric epithelium
VEGF	Vascular endothelial growth factor
VEGFR2	Vascular endothelial growth factor 2
VIM	Vimentin
VPA	Valproic acid
VRAD	Vitamin D3, retinoic, acid and DMEM/F12
WGA lectin	Wheat germ agglutinin
Wnt	Wingless/Integrated
Wnt3a	Wnt family member 3A
Wnt4	Wnt family member 4
Wt	Wild type
WT1	William's tumor 1
Y27632 dihydrochloride	Trans-4-[(1R)-1-aminoethyl]-N-4-pyridinylcyclohexanecarboxamide dihydrochloride
ZO-1	Zona occludin 1

Reference: <http://www.genecards.org>; <https://www.wikigenes.org>; Nomenclature: International Union of Pure and Applied Chemistry (IUPAC).