

Uncovering novel roles of miR-122 in the pathophysiology of the liver: Potential interaction with NRF1 and E2F4 signaling

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Supplementary Data S2A: Literature-mining research for a link between miR-122 responsive genes identified by polyribosome analysis and key words such as 'inflammation', 'cancer', 'viral infection', 'liver disease', or 'cytokine signaling'

ENSEMBL ID	Gene	Gene Name	Associated TF	Keyword	Reference
ENSG00000085224	ATRX	Alpha Thalassemia/Mental Retardation Syndrome X-Linked	YY1	Carcinogenesis	(1–7)
ENSG00000107262	BAG1	BCL2-Associated Athanogene	YY1	Carcinogenesis HCC	(8)
ENSG00000087088	BAX	BCL2-Associated X Protein	YY1	HCC NASH HCV	(9–12)
ENSG00000180329	CCDC43	Coiled-Coil Domain Containing 43	YY1	Viral Infections	(13)
ENSG00000196776	CD47	CD47 Molecule	FOXP3	Tumorigenity HCC	(14–17)
ENSG00000153551	CMTM7	CKLF-Like MARVEL Transmembrane Domain Containing 7	FOXP3	Cytokine Signaling Cancer Cancer Cells	(18–20)
ENSG00000158796	DEDD	Death Effector Domain Containing	YY1	Cancer metastasis TGFb Signalling	(21,22)
ENSG00000150764	DIXDC1	DIX Domain Containing 1	FOXP3	Cancer cell invasion and metastasis Cancer cell Proliferation HCC	(23–26)
ENSG00000046604	DSG2	Desmoglein 2	FOXP3	HCC HBV Cytokine Signaling Cancer	(27–33)
ENSG00000102189	EEA1	Early Endosome Antigen 1	FOXP3	Viral Infection HCV	(34)
ENSG00000164220	F2RL2	Coagulation Factor II (Thrombin) Receptor-Like 2	FOXP3	cancer Cell Proliferation Cancer	(35–37)

Supplementary Data S2A (continued)

ENSEMBL ID	Gene	Gene Name	Associated TF	Keyword	Reference
ENSG00000088832	FKBP1A	FK506 Binding Protein 1A, 12kDa	FOXP3	TGFb Signaling HCV HBV HCC	(38–42)
ENSG00000138757	G3BP2	GTPase Activating Protein (SH3 Domain) Binding Protein 2	NRF1	Cancer cell migration Viral Replication Viral Infection Cytokine Signalling	(43–48)
ENSG00000167110	GOLGA2	Golgin A2	NRF1	Cancer cell invasion Viral Replication	(49,50)
ENSG00000172534	HCFC1	Host Cell Factor C1	YY1	Viral Infection Cancer	(51,52)
ENSG00000115541	HSPE1	Heat Shock 10kDa Protein 1	NRF1	Cancer HCC Inflammation	(53–56)
ENSG00000162434	JAK1	Janus Kinase 1	NRF1	HCC HBV Cytokine Signalling	(57–60)
ENSG00000054523	KIF1B	Kinesin Family Member 1B	E2F4	HCC HBV	(61–65)
ENSG00000131437	KIF3A	Kinesin Family Member 3A	NRF1	Cancer HCV	(66–69)
ENSG00000025800	KPNA6	Karyopherin Alpha 6 (Importin Alpha 7)	YY1	Cytokine Signaling HBV	(70–73)
ENSG00000108424	KPNB1	Karyopherin (Importin) Beta 1	FOXP3	Cancer HCV Cytokine Signaling Inflammation	(74–81)

Supplementary Data S2A (continued)

ENSEMBL ID	Gene	Gene Name	Associated TF	Keyword	Reference
ENSG00000141503	MINK1	Misshapen-Like Kinase 1	FOXP3	Cytokine Signaling Inflammation Cancer Viral Infection	(82–85)
ENSG00000132182	NUP210	Nucleoporin 210kDa	FOXP3	PBC HBV	(86–91)
ENSG00000122884	P4HA1	Prolyl 4-Hydroxylase, Alpha Polypeptide I	NRF1	miR122 target in HSC HCV HCC Fibrosis	(92–95)
ENSG00000277258	PCGF2	Polycomb Group Ring Finger 2	FOXP3	Cancer Cytokine Signaling	(96–99)
ENSG00000071994	PDCD2	Programmed Cell Death 2	FOXP3	Cytokine Signaling Cancer	(100,101)
ENSG00000150593	PDCD4	Programmed Cell Death 4 (Neoplastic Transformation Inhibitor)	NRF1	Cytokine Signaling Fibrosis HBV HCC	(102–106)
ENSG00000100142	POLR2F	Polymerase (RNA) II (DNA Directed) Polypeptide F	NRF1	Cancer Viral Infections	(107–109)
ENSG00000113522	RAD50	RAD50 Homolog (S. Cerevisiae)	NRF1	Tumorigenesis Cirrhosis HCC	(110–113)
ENSG00000173456	RNF26	Ring Finger Protein 26	YY1	Cancer cell Viral Infection	(114,115)
ENSG00000101654	RNMT	RNA (Guanine-7-) Methyltransferase	FOXP3	HCC	(116)
ENSG00000134318	ROCK2	Rho-Associated, Coiled-Coil Containing Protein Kinase 2	FOXP3	HCC CCC Tumorigenesis Cirrhosis HCV	(34,117–122)

Supplementary Data S2A (continued)

ENSEMBL ID	Gene	Gene Name	Associated TF	Keyword	Reference
ENSG00000101665	SMAD7	SMAD Family Member 7	FOXP3	TGF Signaling Carcinogenesis HCC HBV	(123–128)
ENSG00000084070	SMAP2	Small ArfGAP2	FOXP3	HCV HBV	(41,129)
ENSG00000198952	SMG5	SMG5 Nonsense Mediated mRNA Decay Factor	YY1	Viral Infection	(130)
ENSG00000198369	SPRED2	Sprouty-Related, EVH1 Domain Containing 2	FOXP3	Cancer cell Survival TGFb Signaling	(131–135)
ENSG00000166888	STAT6	Signal Transducer And Activator Of Transcription 6, Interleukin-4 Induced	FOXP3	Cytokine Signaling HCC Inflammation Viral Infection	(136–140)
ENSG00000065491	TBC1D22B	TBC1 Domain Family, Member 22B	YY1	Viral Infection HCV	(141,142)
ENSG00000083312	TNPO1	Transportin 1	FOXP3	Chemokine Signaling HCV HCC	(77,143–146)
ENSG00000063244	U2AF2	U2 Small Nuclear RNA Auxiliary Factor 2	NRF1	Cancer Cells HCC Steatosis Viral Infection	(147–150)
ENSG00000120942	UBIAD1	UbiA Prenyltransferase Domain Containing 1	YY1	Cancer Cholesterol/Lipid metabolism (HCC)	(151–154)
ENSG00000156467	UQCRB	Ubiquinol-Cytochrome C Reductase Binding Protein	YY1	HCC Cytokine Signaling	(155–158)
ENSG00000126562	WNK4	WNK Lysine Deficient Protein Kinase 4	FOXP3	Tumorigenesis	(159,160)
ENSG00000176871	WSB2	WD Repeat And SOCS Box Containing 2	FOXP3, YY1	Cytokine Signaling Cancer	(161–165)

Supplementary Data S2A (continued)

ENSEMBL ID	Gene	Gene Name	Associated TF	Keyword	Reference
ENSG00000079246	XRCC5	X-Ray Repair Complementing Defective Repair In Chinese Hamster Cells 5 (Double-Strand-Break Rejoining)	NRF1	HBV HCC Viral Infection	(166–170)

Supplementary Data S2A, part 2 Subset of miR-122 responsive proteins as identified by mass spectroscopy (FC>1.5, p<0.05) which are associated to liver disease

UniProt ID	Gene	Gene Name	Associated to Disease	Reference
Q53EZ4	CEP55	Centrosomal Protein 55	HCC	(171)
P52732	KIF11	Kinesin Family Member 11	HCC	(67,172–174)
Q15758	SLC1A5	Solute Carrier Family 1 Member 5	HCC	(175,176)
P11413	G6PD	Glucose-6-Phosphate Dehydrogenase	HCC, HBV	(177–181)
Q9UBC2	EPS15L1	Epidermal Growth Factor Receptor Pathway Substrate 15 Like 1	HCC	(182)
Q01650	SLC7A5	Solute Carrier Family 7 Member 5	HCC (cannine) liver metastasis	(176,183–188)
Q8WUP2	FBLIM1	Filamin Binding LIM Protein 1	HCC metastasis	(189)
P14618	PKM	Pyruvate Kinase, Muscle	HCC	(190–193)
O14907	TAX1BP3	Tax1 Binding Protein 3	NAFLD	(194)

UniProt ID	Gene	Gene Name	Associated to Disease	Reference
P55786	NPEPPS	Aminopeptidase Puromycin Sensitive	HCC	(195)
P21291	CSRP1	Cysteine And Glycine Rich Protein 1	HCC	(196)
P46940	IQGAP1	IQ Motif Containing GTPase Activating Protein 1	HCC	(197,198)
P04183	TK1	Thymidine Kinase 1	HCC	(199,200)
P21266	GSTM3	Glutathione S-Transferase Mu 3	HCC Alcoholic liver disease	(201–203)
P07148	FABP1	Fatty Acid Binding Protein 1	HCC	(204,205)
O00299	CLIC1	Chloride Intracellular Channel 1	HCC	(206–211)
P04818	TYMS	Thymidylate Synthetase	HCC	(212–216)
P18858	LIG1	DNA Ligase 1	HCC, HCV	(195,217,218)
Q13952	NFYC	Nuclear Transcription Factor Y Subunit Gamma	HBV	(219)
Q99523	SORT1	Sortilin 1	HBV	(220,221)

Supplementary Data S2B, part 1: Description of FFPE samples from livers' of patients included in this study.

Sample	Sample Sex	Age	Risk factors	Cirrhosis	Max. tumor size (cm)	No. Nodules	Grading	Vascular invasion
RWTH_01	1 male	74	HBV	yes	4.2	1	3	1
RWTH_02	2 male	63	HBV	no	7.0	1	3	0
RWTH_03	3 male	62	HBV	no	17.5	multiple	3	1
RWTH_04	4 male	60	HBV	yes	6.7	2	1	0
RWTH_05	5 male	67	HBV	yes	8.0	1	3	0
RWTH_06	6 male	60	HBV	yes	1.3	1	3	1
RWTH_07	7 male	54	HBV	yes	5.9	1	2	1
RWTH_08	8 female	73	unknown	no	7.0	1	1	0
RWTH_09	9 female	71	type 2 diabetes	no	6.0	1	3	1
RWTH_10	10 male	60	unknown	no	4.8	1	3	1
RWTH_11	11 male	67	unknown	no	4.9	multiple	3	0
RWTH_12	12 female	75	C2	yes	3.2	1	3	1
RWTH_13	13 male	63	type 2 diabetes	yes	7.5	1	1	0
RWTH_14	14 male	60	unknown	yes	5.5	2	2	0
RWTH_15	15 male	78	type 2 diabetes	yes	3.8	3	3	0
RWTH_16	16 male	68	C2	yes	4.8	1	2	1
RWTH_17	17 male	67	unknown	no	3.5	1	2	1
RWTH_18	18 male	86	unknown	no	9.0	3	2	1
RWTH_19	19 male	82	unknown	no	12.0	multiple	3	0
RWTH_20	20 male	79	unknown	no	6.0	1	2	0
RWTH_21	21 male	65	unknown	yes	3.6	1	3	1
RWTH_22	22 male	52	unknown	no	3.0	2	1	0
RWTH_23	23 female	79	unknown	no	5.5	1	2	0
RWTH_24	24 female	68	unknown	no	4.5	1	3	0
RWTH_25	25 male	63	NASH	yes	2.5	1	2	1
RWTH_26	26 male	61	unknown	yes	4.9	1	2	0
RWTH_27	27 male	77	PBC	yes	3.0	1	2	0
RWTH_28	28 male	74	type 2 diabetes	no	2.0	1	3	0

Supplementary Data S2B, part 2: Description of samples included in this study obtained from liver resections of patients with HCC or without HCC

ID	Pathology	Etiology	Control	Age	Sex	Recurrence	RFS	Survival	OS	AFP	GGT	AST	ALT	GLDH	Bilirubin	Diagnosed
UKA-01	Haemangioma	n.a.	healthy tissue	37	female	n.a.	n.a.	n.a.	n.a.	missing	32	24	34	missing	0.23	n.a.
UKA-02	Adenoma	n.a.	healthy tissue	24	female	n.a.	n.a.	n.a.	n.a.	missing	63	missing	72	missing	0.24	n.a.
UKA-03	FNH	n.a.	healthy tissue	27	male	n.a.	n.a.	n.a.	n.a.	missing	122	missing	34	missing	0.59	n.a.
UKA-04	Haemangioma	n.a.	healthy tissue	42	female	n.a.	n.a.	n.a.	n.a.	missing	25	20	17	missing	0.87	n.a.
UKA-05	FNH	n.a.	healthy tissue	26	female	n.a.	n.a.	n.a.	n.a.	missing	89	27	44	missing	0.23	n.a.
UKA-06	FNH	n.a.	healthy tissue	26	female	n.a.	n.a.	n.a.	n.a.	missing	140	19	19	missing	0.29	n.a.
UKA-07	Haemangioma	n.a.	healthy tissue	48	female	n.a.	n.a.	n.a.	n.a.	missing	11	54	18	missing	0.57	n.a.
UKA-08	HCC	NAFLD	n.a.	80	male	yes	5	no	31	6	53	25	25	0.48	13.4	CT (also confirmed by histology)
UKA-09	HCC	NAFLD+HBV	n.a.	65	male	yes	0	yes	1	4982	242	35	35	0.45	13	CT (also confirmed by histology)
UKA-10	HCC	C2	n.a.	72	male	yes		yes	25	901	129	24	24	1.11	13.5	CT (also confirmed by histology)
UKA-11	HCC	NAFLD	n.a.	87	male	yes	6	no	22	2	22	22	14	0.65	16.7	CT (also confirmed by histology)
UKA-12	HCC	NAFLD	n.a.	84	male	yes	21	no	23	2	316	48	38	0.84	14.7	CT (also confirmed by histology)
UKA-13	HCC	NAFLD	n.a.	68	female	yes	4	yes	11	20	452	58	39	1.85	11.8	CT (also confirmed by histology)
UKA-14	HCC	NAFLD + C2	n.a.	78	male	yes	7	no	21	30	288	43	14	0.74	14.4	CT (also confirmed by histology)

Supplementary Data S2C part 1: Primer sequences used for qPCR amplification of GOIs.

Gene	Primer	Sequence 5' - 3'
hsa β -Actin	Forward	CAG CAA GCA GGA GTA TGA CG
	Reverse	AAA GTC ATG CCA ATC TCA TC
hsa BAG1	Forward	CAT TTG GAG AAG TCT GTG GAG A
	Reverse	AAA TCC TTG GGC AGA AAA CC
hsa BAX	Forward	AGC AAA CTG GTG CTC AAG G
	Reverse	TCT TGG ATC CAG CCC AAC
hsa CCDC43	Forward	GAA GAG GAG AAG CAG AGA AAA GC
	Reverse	GCA CCT GAA TCA TCC TTC TCA
hsa CD47	Forward	AGT GAC ACG GTA GCA CCA GTT
	Reverse	GAA CAC AGT GCT CTG AGA ACA AG
hsa CEP55	Forward	AGA AGA AGA GAT CCG AAG AGC
	Reverse	AGC AGA GAT GTG TAA AGA AAC TG
hsa CLIC1	Forward	CCT GTT GCC AAA GTT ACA CA
	Reverse	GTG AAT CCC CGG TAC TTC TT
hsa CMTM7	Forward	TAT CAG CTG GCC CCT GTC
	Reverse	CTT GGA AGC TGC CAC AAT G
hsa DEDD	Forward	AGC CCT CAG TGA TCC AGA AC
	Reverse	GGC AAC ACA CCA CAG GAT AG
hsa DIXDC1	Forward	TTA CGC CCT TCA TGG TCA AT
	Reverse	TCC TTC CCG ATC AAT AGC TG
hsa DSG2	Forward	AAT TGC GCT CAT GAT TTT GG
	Reverse	GCA ATG GCA CAT CAG CAG TA
hsa E2F4	Forward	GGT ATC GGG CTA ATC GAG AA
	Reverse	AAT CTC CCG GGT ATT GCA G
hsa EEA1	Forward	GAA TTG CAA AGA AAG CTG GAT AA
	Reverse	TTC AAC GCT TGT GTA TGT TTG A
hsa EPS15L	Forward	TTA CCT CGG ATC CAT TCA CG
	Reverse	TCA CTG GAT TCA AAG GGG TC
hsa F2RL2	Forward	CTA CGT CCA GGC CAC CTC TA
	Reverse	GTG AAG TGG TGG AGG GTA GG
hsa G3BP2	Forward	CCT GTT TCT CTG CCA CAA GA
	Reverse	GGA GGC AGG TTT TTA CTG GTC
hsa G6PD	Forward	CTG GTG GCC ATG GAG AAG
	Reverse	TGC ATT TCA ACA CCT TGA CCT
hsa Hamp	Forward	CAA CAG ACG GGA CAA CTT GC
	Reverse	AGC AGA AAA TGC AGA TGG GGA
hsa HCFC1	Forward	CGC AAT GAG AAG GGC TAT G
	Reverse	TGG TGC CAG AGC TGT CTT TA
hsa HPRT1	Forward	AGG TCG CAA GCT TGC TGG
	Reverse	CCA ACA CTT CGT GGG GTC

Supplementary Data S2C part 1 (continued)

Gene	Primer	Sequence 5'-3'
hsa KIF1B	Forward	AAG GAC CTT CTT CGT GCT CA
	Reverse	GAG GGA CCC CAT GGA TGT A
hsa KIF3A	Forward	AAC TTC AAA GGG GAA AGC AAG
	Reverse	TTT CAG GCT TTG CAG AAC G
hsa KPNA6	Forward	CTT ATT GTG GCC TCA TAG AGG AA
	Reverse	GCC TTC TGG TAG ATC TCC TGG T
hsa KPNB1	Forward	CTG GAA TCG TCC AGG GAT TA
	Reverse	TCT GGG TTG TAC CAG CAT CA
hsa MINK1	Forward	AGT TCC TGT GTG AGC GGA AT
	Reverse	TGC AGT TAC GGT TCA GAG TCA
hsa NRF1	Forward	CAG TCA CTA TGG CGC TTA ACA
	Reverse	ATC TGT CCC CCA CCT TGT AA
hsa NUP210	Forward	GGA CAC AGC CCC CAC TAT T
	Reverse	CAT AGG CTG GGC TCC ACA
hsa P4HA1	Forward	AAG ATC TAA CAG GAC TAG ATG TTT CCA
	Reverse	TCC TCC AAC TCC ATA ATT TGC
hsa PCDC4	Forward	TGG AAA GCG TAA AGA TAG TGT GTG
	Reverse	AAT ATT CTT TCA GCA GCA TAT CAA TC
hsa PCGF2	Forward	TTC TCC GCA ACA AGA TGG AT
	Reverse	AGT GGC TCG TCC TCG TAC A
hsa PDCD2	Forward	TGG TGC CAA GAG AAT ATT GGA
	Reverse	CCC AGT CTG TCA GCC TTC A
hsa POLR2F	Forward	GCG AAT CAC CAC ACC ATA CA
	Reverse	ACC ATC ACA GGG GCA CAC
hsa pri-miR-122	Forward	TTT CCT AGA CTG CAG AAT TGA TCA C
	Reverse	ATA ATC TGG CCG AAT GAA TGG ATA C
hsa RNF26	Forward	GGC GTT GGG GTT AGT ATC TCT
	Reverse	GCC TCA TCA GAC GAT CAC AG
hsa RNMT	Forward	TTG GAC CTG GGA TGT GGT
	Reverse	GAC AGA AAC ATC GGC AAT ATC A
hsa SLC1A5	Forward	GAT TCG TTC CTG GAT CTT GC
	Reverse	GGT AGA GTA TGA GCG AAA GG
hsa SLC7A1	Forward	TCA TCA CCG GCT GGA ACT
	Reverse	CCC TCG CTA CGC TTG AAG TA
hsa SMAD7	Forward	AAA CAG GGG GAA CGA ATT ATC
	Reverse	ACC ACG CAC CAG TGT GAC
hsa SMG5	Forward	GAT TTG CTG AAG AAG GAA CAC C
	Reverse	TTC TGG CAG CGA ATG TAC C
hsa SPRED2	Forward	GAG CAC CGG AGG ATT TAT ACC
	Reverse	GAA GCT CAC CTG GCG GTA G

Supplementary Data S2C, part 1 (continued)

Gene	Primer	Sequence 5'-3'
hsa TBC1D22B	Forward	GAG GCT GAC AGC TTT TGG TG
	Reverse	CCT GGT TGT GCA AAG GTG TA
hsa TFR2	Forward	AAG CTG CGG CAG GAG ATC TA
	Reverse	GCG ACA CGT ACT GGG AAA GG
hsa TK1	Forward	GTC ATA GGC ATC GAC GAG G
	Reverse	GCA GAA CTC CAC GAT GTC A
hsa TNPO1	Forward	TGA TGA TAC AAT TTC TGA CTG GAA TC
	Reverse	GGC AGC AGT TCA TCA CGA TA
hsa U2AF2	Forward	CAG GCC TCA CGA CTA CCA G
	Reverse	GGG ACC ACA GTG GAC ACA A
hsa WSB2	Forward	TCC TAT GAC CAA TGG GCT TT
	Reverse	CGT GGC CAT CTC TTG TCC
hsa XRCC5	Forward	CAA AGA GGA AGC CTC TGG AA
	Reverse	AGC TGC TGT GTC TCC ACT TG
hsa YY1	Forward	TGG AGA GAA CTC ACC TCC TGA
	Reverse	TCT TTA ATT TTT CTT GGC TTC ATT C

Supplementary Data S2C, part 2: Oligonucleotide primer sequences used for miQPCR.

miRNA	Primer	Sequence 5'-3'
hsa-miR-122-5p	Forward	GTG ACA ATG GTG TTT GGG
hsa-miR-192-5p	Forward	TGA CCT ATG AAT TGA CAG CCG
Upm2A	Reverse	CCC AGT TAT GGC CGT TTA

Supplementary Data S2D, part1: Primer sequences G6PD 3'UTR into luciferase reporter plasmids. Primer sequence is given as well as the recognition site for restriction enzymes (RE) used for cloning purposes.

Gene	Primer	Sequence 5' - 3'	RE
hsa G6PD 3'UTR	Forward	GAG GTA CCG GGT TTC CAG TAT GAG GGC A	<i>KpnI</i>
	Reverse	GAG CTA GCT TGC GGA TTT AAT GGC AGG G	<i>NheI</i>

Supplementary Data S2D, part2: Primer sequences the cloning of the 3'UTR of GOIs into luciferase reporter plasmids by using In Fusing HD. 3'UTRs sequences are given in **BLACK**, In Fusing Sequences (i.e., overlapping with vector sequences) are given in **RED**.

Gene	Primer	Sequence 5' - 3'
hsa TK1(+) 3'UTR	TK1(+) InFus For	AATCGATAGGTACCGAGCTC GGGACCTGCGAGGGCCGC
	TK1(+) InFus Rev	TCGAGCCCGGGCTAGC TGCGTCCACCAACCAGTGAATTTTC
hsa TK1(-) 3'UTR	TK1(-) InFus For	AATCGATAGGTACCGAGCTC TGCGTCCACCAACCAGTGAATTTTC
	TK1(-) InFus Rev	TCGAGCCCGGGCTAGC GGGACCTGCGAGGGCCGC
hsa CLIC1(+) 3'UTR	CLIC1(+) InFus For	AATCGATAGGTACCGAGCTC GCCCCTCTGGGACTCCC
	CLIC1(+) InFus Rev	TCGAGCCCGGGCTAGC TTGCGTAAAAACACTTGATTTT
hsa CLIC1(-) 3'UTR	CLIC1(-) InFus For	AATCGATAGGTACCGAGCTC TTGCGTAAAAACACTTGATTTT
	CLIC1(-) InFus Rev	TCGAGCCCGGGCTAGC GCCCCTCTGGGACTCCC
hsa CEP55(+) 3'UTR	CEP55(+) InFus For	AATCGATAGGTACCGAGCTC CAAAATAAGTATTTGTTTTG
	CEP55(+) InFus Rev	TCGAGCCCGGGCTAGC TTAAACATTAAATAATTTTATTC
hsa CEP55(-) 3'UTR	CEP55(-) InFus For	AATCGATAGGTACCGAGCTC TTAAACATTAAATAATTTTATTC
	CEP55(-) InFus Rev	TCGAGCCCGGGCTAGC CAAAATAAGTATTTGTTTTG
hsa KIF11(+) 3'UTR	KIF11(+) InFus For	AATCGATAGGTACCGAGCTC TTCACTTGGGGGTTGGCA
	KIF11(+) InFus Rev	TCGAGCCCGGGCTAGC TTAATGTAGAAACCACATTTATTAA
hsa KIF11(-) 3'UTR	KIF11(-) InFus For	AATCGATAGGTACCGAGCTC TTAATGTAGAAACCACATTTATTAA
	KIF11(-) InFus Rev	TCGAGCCCGGGCTAGC TTCACTTGGGGGTTGGCA
hsa EPS15L1(+) 3'UTR	EPS15L1(+) InFus For	AATCGATAGGTACCGAGCTC AGGAAAGCAGATGAGGTGTG
	EPS15L1(+) InFus Rev	TCGAGCCCGGGCTAGC TTTCATTTCCCTTAGCATTTTATTT
hsa EPS15L1(-) 3'UTR	EPS15L1(-) InFus For	AATCGATAGGTACCGAGCTC TTTCATTTCCCTTAGCATTTTATTT
	EPS15L1(-) InFus Rev	TCGAGCCCGGGCTAGC AGGAAAGCAGATGAGGTGTG
hsa SLC1A5(+) 3'UTR	SLC1A5(+) InFus For	AATCGATAGGTACCGAGCTC ACCCCGGGAGGGACCTTC
	SLC1A5(+) InFus Rev	TCGAGCCCGGGCTAGC TTAAATAGTTGACACTCAATTTTAT
hsa SLC1A5(-) 3'UTR	SLC1A5(-) InFus For	AATCGATAGGTACCGAGCTC TTAAATAGTTGACACTCAATTTTAT
	SLC1A5(-) InFus Rev	TCGAGCCCGGGCTAGC ACCCCGGGAGGGACCTTC

Supplementary references

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