

A novel miRNA-4484 is up-regulated on microarray and associated with increased MMP-21 expression in serum of systemic sclerosis patients

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Supplementary Table 1. Predicted targets for hsa-miR-4484 in Target Scan, miRSearch, miRDB, miRTarBase, DIANA-microT databases, which may play a role in SSc pathogenesis

Gene target	Representative transcript	Gene name	Software
AATF	ENST00000225402.5	apoptosis antagonizing transcription factor	Target Scan, miRSearch
ADAM19	ENST00000257527.4	ADAM metalloproteinase domain 19	Target Scan
ADAM22	ENST00000398204.4	ADAM metalloproteinase domain 22	Target Scan
ADAM8	ENST00000445355.3	ADAM metalloproteinase domain 8	Target Scan, miRSearch
ADAMTS20	ENST00000389420.3	ADAM metalloproteinase with thrombospondin type 1 motif, 20	Target Scan
ADAMTS4	ENST00000367996.5	ADAM metalloproteinase with thrombospondin type 1 motif, 4	Target Scan
ADAMTS5	ENST00000284987.5	ADAM metalloproteinase with thrombospondin type 1 motif, 5	Target Scan
ADCY3	ENST00000260600.5	adenylate cyclase 3	Target Scan, miRDB
AGO3	ENST00000373191.4	argonaute RISC catalytic component 3	miRDB, DIANA-microT
AK4	ENST00000545314.1	adenylate kinase 4	Target Scan, miRTarBase
ANKRD23	ENST00000318357.4	ankyrin repeat domain 23	Target Scan, miRTarBase
ANLN	ENST00000265748.2	anillin, actin binding protein	Target Scan, miRSearch
ANO1	ENST00000355303.5	anoctamin 1, calcium activated chloride channel	Target Scan, miRDB
APP	ENST00000346798.3	amyloid beta (A4) precursor protein	Target Scan, miRDB, miRTarBase
BCL2L2-PABPN1	ENST00000553781.1	BCL2L2-PABPN1 readthrough	Target Scan, miRDB, miRTarBase
CADM1	ENST00000452722.3	cell adhesion molecule 1	Target Scan, miRTarBase
CDC42SE1	ENST00000439374.2	CDC42 small effector 1	Target Scan, miRTarBase
CDON	ENST00000392693.3	cell adhesion associated, oncogene regulated	Target Scan, miRTarBase
CERS2	ENST00000368954.5	ceramide synthase 2	Target Scan, miRTarBase
COL12A1	ENST00000322507.8	collagen, type XII, alpha 1	Target Scan
COL20A1	ENST00000422202.1	collagen, type XX, alpha 1	Target Scan
COL5A1	ENST00000371817.3	collagen, type V, alpha 1	Target Scan
COL9A2	ENST00000372748.3	collagen, type IX, alpha 2	Target Scan
CTC1	ENST00000315684.8	CTS telomere maintenance complex component 1	Target Scan, miRTarBase
CTGF	ENST00000367976.3	connective tissue growth factor	Target Scan
CTXN1	ENST00000318978.4	cortexin 1	Target Scan, miRTarBase
DDX17	ENST00000396821.3	DEAD (Asp-Glu-Ala-Asp) box helicase 17	miRDB, DIANA-microT
DDX3X	ENST00000399959.2	DEAD (Asp-Glu-Ala-Asp) box helicase 3, X-linked	Target Scan
EFNA1	ENST00000368407.3	ephrin-A1	Target Scan, miRTarBase
EGFR	ENST00000275493.2	epidermal growth factor receptor	Target Scan
EIF4E	ENST00000450253.2	eukaryotic translation initiation factor 4E	Target Scan, miRDB
FBXO34	ENST00000313833.4	F-box protein 34	Target Scan, miRDB
FGF1	ENST00000360966.5	fibroblast growth factor 1 (acidic)	Target Scan

FZD4	ENST00000531380.1	frizzled family receptor 4	Target Scan
GABARAP	ENST00000302386.5	GABA(A) receptor-associated protein	Target Scan, miRTarBase, DIANA- microT
GATAD1	ENST00000287957.3	GATA zinc finger domain containing 1	Target Scan, miRTarBase
GLIS3	ENST00000324333.10	GLIS family zinc finger 3	Target Scan, DIANA- microT
GXYLT1	ENST00000398675.3	glucoside xylosyltransferase 1	Target Scan, miRTarBase
HAVCR1	ENST00000522693.1	hepatitis A virus cellular receptor 1	Target Scan, miRTarBase, DIANA- microT
HOXC5	ENST00000312492.2	homeobox C5	Target Scan, miRDB
HSPA2	ENST00000394709.1	heat shock 70kDa protein 2	Target Scan
IGLON5	ENST00000270642.8	IgLON family member 5	miRDB, DIANA-microT
IL17D	ENST00000304920.3	interleukin 17D	Target Scan
INO80D	ENST00000403263.1	INO80 complex subunit D	Target Scan miRTarBase
ITGA9	ENST00000264741.5	integrin, alpha 9	Target Scan
KIF2C	ENST00000372224.4	kinesin family member 2C	Target Scan, miRTarBase, DIANA- microT
KLF5	ENST00000377687.4	Kruppel-like factor 5 (intestinal)	Target Scan
KLHL15	ENST00000328046.8	kelch-like family member 15	Target Scan, DIANA- microT
KLHL29	ENST00000486442.1	kelch-like family member 29	Target Scan, miRDB
KPNB1	ENST00000290158.4	karyopherin (importin) beta 1	Target Scan, miRTarBase
KRT80	ENST00000313234.5	keratin 80	Target Scan, miRSearch
LAMB3	ENST00000356082.4	laminin, beta 3	Target Scan, miRSearch
LAMC1	ENST00000258341.4	laminin, gamma 1 (formerly LAMB2)	Target Scan, miRTarBase, DIANA- microT
LIMD1	ENST00000273317.4	LIM domains containing 1	Target Scan, miRTarBase, DIANA- microT
LITAF	ENST00000413364.2	lipopolysaccharide-induced TNF factor	Target Scan, miRTarBase
LRCH3		leucine-rich repeats and calponin homology (CH) domain containing 3	miRSearch
LRRC45	ENST00000306688.3	leucine rich repeat containing 45	Target Scan, miRTarBase
MAPKAPK5	ENST00000550735.2	mitogen-activated protein kinase- activated protein kinase 5	Target Scan, miRTarBase
MED1	ENST00000300651.6	mediator complex subunit 1	Target Scan, miRSearch
MMP8	ENST00000236826.3	matrix metalloproteinase 8 (neutrophil collagenase)	Target Scan
MSRB3	ENST00000308259.5	methionine sulfoxide reductase B3	Target Scan, miRDB
MTHFD2	ENST00000394053.2	methylenetetrahydrofolate dehydrogenase (NADP+ dependent) 2, methenyltetrahydrofolate cyclohydrolase	Target Scan, miRDB
MYCN	ENST00000281043.3	v-myc avian myelocytomatosis viral oncogene neuroblastoma derived homolog	Target Scan, miRDB

MYO1E	ENST00000288235.4	myosin IE	Target Scan
NDUFV3	ENST00000340344.4	NADH dehydrogenase (ubiquinone) flavoprotein 3, 10kDa	Target Scan, miRTarBase, DIANA-microT
NFIA	ENST00000403491.3	nuclear factor I/A	Target Scan, DIANA-microT
NPM1	ENST00000393820.2	nucleophosmin (nucleolar phosphoprotein B23, numatrin)	Target Scan, miRTarBase, DIANA-microT
NR4A1	ENST00000394824.2	nuclear receptor subfamily 4, group A, member 1	Target Scan
PABPN1	ENST00000397276.2	poly(A) binding protein, nuclear 1	Target Scan, miRDB
PEBP1	ENST00000261313.2	phosphatidylethanolamine binding protein 1	miRTarBase, DIANA-microT
PIK3IP1	ENST00000441972.1	phosphoinositide-3-kinase interacting protein 1	Target Scan
PITPNM2	ENST00000280562.5	phosphatidylinositol transfer protein, membrane-associated 2	Target Scan, miRDB
PLEKHA8	ENST00000449726.1	pleckstrin homology domain containing, family A (phosphoinositide binding specific) member 8	Target Scan, miRTarBase
PPARGC1A	ENST00000264867.2	peroxisome proliferator-activated receptor gamma, coactivator 1 alpha	Target Scan
PSD3	ENST00000327040.8	pleckstrin and Sec7 domain containing 3	Target Scan, miRSearch
PTCH2	ENST00000447098.2	patched 2	Target Scan, miRDB, miRTarBase
PTGES	ENST00000340607.4	prostaglandin E synthase	Target Scan
PTPN14	ENST00000366956.5	protein tyrosine phosphatase, non-receptor type 14	Target Scan, miRTarBase, DIANA-microT
PTPRF	ENST00000372414.3	protein tyrosine phosphatase, receptor type, F	Target Scan, miRTarBase
R3HDM1	ENST00000264160.4	R3H domain containing 1	miRSearch, miRDB
RBM28	ENST00000223073.2	RNA binding motif protein 28	Target Scan, miRTarBase
RORA	ENST00000335670.6	RAR-related orphan receptor A	Target Scan, DIANA-microT
RPA1	ENST00000254719.5	replication protein A1, 70kDa	miRSearch, miRDB
RPL14	ENST00000416518.1	ribosomal protein L14	Target Scan, miRTarBase
SACM1L	ENST00000389061.5	SAC1 suppressor of actin mutations 1-like (yeast)	miRSearch, miRDB
SATB2	ENST00000417098.1	SATB homeobox 2	Target Scan, DIANA-microT
SERBP1	ENST00000370994.4	SERPINE1 mRNA binding protein 1	Target Scan
SERINC5	ENST00000512721.1	serine incorporator 5	Target Scan, miRTarBase, DIANA-microT

SERTAD2	ENST00000313349.3	SERTA domain containing 2	Target Scan, DIANA-microT
SHC2	ENST00000264554.6	SHC (Src homology 2 domain containing) transforming protein 2	Target Scan, miRSearch
SHC3	ENST00000375835.4	SHC (Src homology 2 domain containing) transforming protein 3	Target Scan, miRDB
SLC30A7	ENST00000370112.4	solute carrier family 30 (zinc transporter), member 7	Target Scan, miRTarBase, DIANA-microT
SMAD4	ENST00000398417.2	SMAD family member 4	Target Scan
SMAD9	ENST00000399275.2	SMAD family member 9	Target Scan
SMG7	ENST00000367537.3	SMG7 nonsense mediated mRNA decay factor	Target Scan, miRSearch
SULT4A1	ENST00000330884.4	sulfotransferase family 4A, member 1	miRSearch, miRDB
THOC5	ENST00000490103.1	THO complex 5	Target Scan, miRSearch
THSD4	ENST00000355327.3	thrombospondin, type I, domain containing 4	Target Scan, miRTarBase, DIANA-microT
TIMP2	ENST00000585421.1	TIMP metalloproteinase inhibitor 2	Target Scan
TIMP3	ENST00000266085.6	TIMP metalloproteinase inhibitor 3	Target Scan
TRAK2	ENST00000332624.3	trafficking protein, kinesin binding 2	miRSearch, miRDB
UCK2	ENST00000367879.4	uridine-cytidine kinase 2	Target Scan, miRTarBase, DIANA-microT
YAP1	ENST00000282441.5	Yes-associated protein 1	miRTarBase, DIANA-microT
YBX1	ENST00000321358.7	Y box binding protein 1	miRSearch, miRDB