

Supplemental Materials

Wnt signaling stimulates cooperation between GREB1 and HNF4 α to promote proliferation in hepatocellular carcinoma

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Supplemental Materials 1-3.

Supplemental Material 1

Antigen	Company	Catalog#	Purpose	Dilution ratio
β-Catenin	BD Biosciences	#610154	WB	1/1000
			IHC	1/100
β-Catenin	Cell Signaling Technology	8480S	ChIP	
FOXA2	R&D Systems	AF2400	ChIP	
			PLA	1/100
FOXA2	Cell Signaling Technology	#8186S	WB	1/1000
			PLA	1/100
GAPDH	Fujifilm Wako	016-25523	WB	1/1000
GREB1	Cell Signaling Technology	#65171	WB	1/1000
GREB1	Merck Millipore	#MABS62	IHC	1/100
GREB1	Proteintech	28699-1-AP	ChIP	
GREB1	Abcam	ab72999	PLA	1/100
GLUL (GS)	Merck Millipore	MAB302	WB	1/1000
			IHC	1/100
GPC3	Nichirei Biosciences	418021	IHC	Undiluted
HNF4α	Cell Signaling Technology	3113S	WB	1/1000
			PLA	1/100
HNF4α	Perseus Proteomics	PP-H1415-00	ChIP	
HSP90	BD Biosciences	#610419	WB	1/1000
H3K27ac	Active Motif	39034	ChIP	
p300	Abcam	ab14984	PLA	1/100
TCF4	Cell Signaling Technology	2569S	ChIP	
TCF4	Merck Millipore	05-511	ChIP	
			PLA	1/100
Ki67	Cell Signaling Technology	#9027	IHC	1/100
IgG	Cell Signaling Technology	#3900	ChIP	

Supplemental Material 1: List of antibodies used in this study

List the supplier, catalog number, purpose of use, and dilution rate for the antibodies used in this study.

Supplemental Material 2

Gene	siRNA or ASO	Sequences (5'→3')
Human CTNNB1#1	siRNA	CCCACTAATGTCCAGCGTT
Human CTNNB1#2	siRNA	GCATAACCTTTCCCATCAT
Human HNF4α#1	siRNA	ATGACTTGAGGCCTTACTT
Human HNF4α#2	siRNA	CAGTCATTCTGGGAACATG
Human FOXA2#1	siRNA	CAAGGGAGAAGAAATCCAT
Human FOXA2#2	siRNA	AGAGGGTTGTACTATTGTT
Control	siRNA	CAGTCGCGTTTGCG ACTGG
Human GREB1	ASO	A(Y) [^] T(Y) [^] T(Y) [^] g [^] a [^] g [^] g [^] g [^] t [^] a [^] g [^] g [^] 5(Y) [^] A(Y) [^] a
Control	ASO	T(Y) [^] a [^] g [^] A(Y) [^] g [^] a [^] G(Y) [^] t [^] a [^] 5(Y) [^] c [^] c [^] A(Y) [^] t [^] c

For ASO; Lower Case=DNA / N(Y)=AmNA / 5(Y)=AmNA_mC / ^=Phosphorothioated

Supplemental Material 2: List of siRNAs and antisense oligonucleotides (ASOs) used in this study

List of siRNA and ASO sequences for knockdown experiments used in this study.

Supplemental Material 3

Gene	Forward	Reverse
Human GAPDH	TCCTGCACCACCAACTGCTT	TGGCAGTGATGGCATGGAC
Human UBC	CCTGGTGCTCCGTCTTAGAG	TTTCCCAGCAAAGATCAACC
Human GREB1	GTGCTCTACCGGCTCAAGTT	ACCGAGTCCACCACGTAGAT
Human AXIN2	CTGGCTCCAGAAGATCACAAAG	CATCCTCCCAGATCTCCTCAA
Human HNF4A	CGAGCAGATCCAGTTCATCA	TCACACATCTGTCCGTTGCT
Human FOXA2	ACAGAGGGCCACACAGATA	GCTTGAAGAAGCAGGAGTCTAC
Human GINS1	GGTCACTGGGAGGAGATGAA	GCTCCAGGACTCCTTGTCTG
Human SF3B6	CGAACATTCGACTTCCACCT	ACATGCATTCTTGGCATCAA
Human SEC13	CGTGTGTTTCATTTGGACCTG	CCCTCTGTCACTGATGCTGA
Human PSMG4	GCTGAATGCTCCACTCTTCC	GGGAAAGCCTCCATCTCTTC
Human RBMX	TGGAAGCAGTCGCTATGATG	GAGGGTACCCCTTTCCATA
Human NDUFA10	TGAAGCGGGGATTCATTATC	CACAACACCTTGTCCCTGTGG
Human TBCA	GGATGATGATCCCAGATTGC	GCGGTATAAAGGGCAAGTGA
Human IGF2	GTGCTGTTTCCGCAGCTG	AGGGGTGACACGTCCCTC
Human LIN28B	CCTCCTCAGCCAAAGAAGTG	GTGGTGATGTACAGCCATGC
Human TMEM245	AGCCCTACTCCTGACTGCAA	GCAGAATTCAGGGCTCTTTG
Human TRIB2	GATGATTCCCTCTCCGACAA	AAGAGGGAGCTGGGTTCAAT
Human FOXRED2	ATCAGTGCAGCGTCTCTTT	CTGTCTCAAAGGCCGAGTTC

Supplemental Material 3: List of primers used in this study

List of primer sequences for real-time PCR analysis used in this study.