Supplementary Materials: Tumor Protein (TP)-p53 Members as Regulators of Autophagy in Tumor Cells upon Marine Drug Exposure

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Figures S1–S6. Schematic representation of the selected autophagic gene promoters. Promoter sequences were obtained from the UCSC website (http://genome.ucsc.edu/) and analyzed using the TFSEARCH software (http://mbs.cbrc.jp/research/db/TFSEARCH.html). TP63 responsive sequences were defined manually using the previously reported cognate sequence. Consensus sequences for the specific transcriptional factors were highlighted in bold with the grey background and boxed. The sequences used to amplify the ChIP-precipitated DNA are underlined.

-1900	GCACGTAGCC	ACCTGTTCAC	TCATTTTTCT	CTTGCAATTT	TGCCACGGGT			
-1850	GGTGCAATCT	TTGCTCTTCT	TGTCCCCCAC	CCCTAAGCGC	TGGGAGCTCC			
-1800	TGCAGGCGGG	TCTTGTTCTC	ATG CTGTCAA	CTGCAGCACT	TACCTCGCAG			
TP53								
-1750	CGTGTGCTCT	$\mathtt{CTGGGCAGGC}$	${\tt CGGTGTGCAG}$	${\tt CAGGCACTCC}$	AGGATGTGAG			
-1700	TGAATGCTAT	${\tt GGCTGACTAC}$	GGGGCACTGT	${\tt GGAACCTCTT}$	TATTGGGAAA			
-1650	ACAAA CATGG	TGGGCCAGGA	GACCTCTTGT	CCCTTCCAGC	TCGGTGGCTT			
		TP53						
-1600	CTGGCCCCCA	GTCCAGG GTC	GGGAGTCTGT	GTGTCCTGCG	${\tt GCCTGGAGGA}$			
TP63								
-1550	TGAGCTGGGT	GCAGGTAAAA	GGCATCCAGG	ACTTGCTGAT	CCAGCCCAGG			
-1550	TGAGCTGGGT	GCAGGTAAAA	GGCATCCAGG		CCAGCCCAGG P63			
-1550 -1500	<u> </u>		GGCATCCAGG TGG GCTGCTC	TI	263			
	<u> </u>			TI	263			
	<u> </u>	GTCCAGCTGC TP63	TGG GCTGCTC	TI	P63 CATGGAGGGT			
-1500	GCAT CAGGCT CCTGGCTGAA	GTCCAGCTGC TP63	TGGGCTGCTC	TI	263 CATGGAGGGT TGTACTGAAG			
-1500 -1450	GCAT CAGGCT CCTGGCTGAA	GTCCAGCTGC TP63 GTGTGTGTTT	TGGGCTGCTC	TI TGGGAGGCAG ACTTTAGGAC	263 CATGGAGGGT TGTACTGAAG			
-1500 -1450	GCAT CAGGCT CCTGGCTGAA	GTCCAGCTGC TP63 GTGTGTGTTT	TGGGCTGCTC	TI TGGGAGGCAG ACTTTAGGAC GCATTTGCAA	263 CATGGAGGGT TGTACTGAAG			
-1500 -1450 -1400	GCAT CAGGCT CCTGGCTGAA GCTGGGTTGG	GTCCAGCTGC TP63 GTGTGTGTTT TGAGCATTGT	TGGGCTGCTC CTGGGCTGTT TTAGAATCAT	TI TGGGAGGCAG ACTTTAGGAC GCATTTGCAA TP53	P63 CATGGAGGGT TGTACTGAAG AAGCAAG			
-1500 -1450 -1400 -1350	GCAT CAGGCT CCTGGCTGAA GCTGGGTTGG TGCACGTGGT	GTCCAGCTGC TP63 GTGTGTGTTT TGAGCATTGT GAAAGCCATT	TGGGCTGTT CTGGGCTGTT TTAGAATCAT CCAACTAGCG	TI TGGGAGGCAG ACTTTAGGAC GCATTTGCAA TP53 CGCAACGTGT	P63 CATGGAGGGT TGTACTGAAG AAGCAAG TCT ACGGTGAACA			

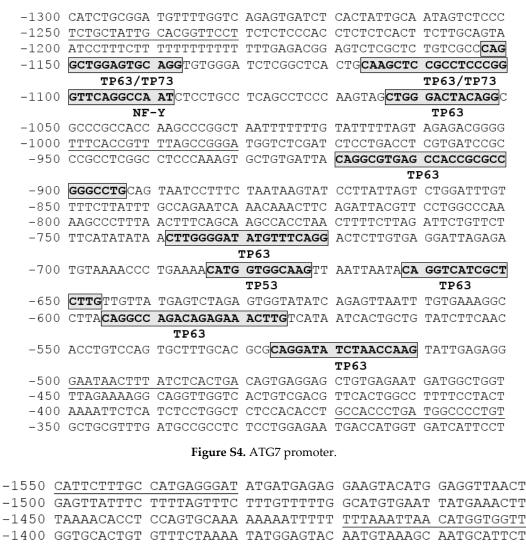
Figure S1. ATG1/ULK1 promoter.

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-200	CAGGAAGTTG	AATTTTAAGT	CAAATCAAGT	AATCACCTTT	CACCTATTGG	
TP73						
-195	O GTTTCTTCAT	ACATAG TTTC	CCCCAAA ACA	ATTTTTTTTT	TTTTTTGAGA	
			STAT			
	0 CAGGGTCTCT			TGATACAATC		
-185	O GCAACCTTGA	CCTCCTGGGC	TCATGTAATC	CTCCTTCCTC	AAG CACTGGA	
		_		TP53/TP7		
-180	O GTAGCTGGGA	CTGTAGGCGC	ATGCCACCAT	G CCCTCCTAA	TTTTTGTGTT	
			TP53			
-175	0 TTTTGTAGAG	ATGTGGTCTT	GC CATGTTGT	GCAGGCTGGT		
				TP53/TP7		
-170	0 TGGGCT <mark>CAAG</mark>		ACCTG GGCCT	CCCAAAGTGC	TGGGATTACA	
		TP63				
-165	0 GG CAAGAGCC		G TCCCAACAT	TTTGTTAGGA	AATAATTTTG	
1.00	^ *********	TP63		amazzmz aaa		
	0 AACACACAGC					
-155	0 AACCTAGATT	CTACCATCTA			CCATTATATT	
1.50	^ <====================================	7 mmmm 7 cm 7 m	NF-		3 m a a 3 m a m 3 m	
-150			ATTTGGTTAA			
-145			TTTTTTAGAT	ACATTTTAAA		
-140	O TATACTTTIG O TTCTTACAGA		GGAAGGCAAT	GCACCTTAAT GGACACTGTA		
	o tictiacaga O cigcatigag			TGTGGCTTTC		
	O CIGCATIGAG O GACTGCTACC					
-125	U GACIGCIACC	CITACTAAGA	AAIGIAIIIC	ACATICCIAI	CCAGIGIACA	
Figure S2. ATG5 promoter.						
-700	GATTACAGGC	gcacgcca <mark>cc</mark>	AAT GCCAGCT	AATTGTATTT	TTTAGTAGAG	
NF-Y						
-650	ACGGGATTTA A	ACCATTTTGG	CAGGCTGGT	CTCGAACTCC	TGACCTTG	
				TP63	_	
-600	ATCCGCCCGC	CTCGGCCTCC	CAAAGTGCTG	GAATTA CAAG	CGTGAGCCAC	
					TP53	
-550	CATG CCCGGC	CTTTTGTTGT	TGCTGTTGTT	GTTCTGAGAT	GGAGCCTTGC	
-500	CCTGTCGCCC	AGGCTGGAGT	GCAGTGGCCC	GATCTCGGCT	CACTGCAACC	
-450	TCCACCTCCC 2	AGGTTCAAGC	GATTCTCCTG	CCTCAGCCTC	CCGAGTAGCT	
-400	GGGATTAAGC	TGGGATTATA	GGCGTGCCCC	ACCACGCCCG	GCTAGTTTTT	
-350	GTATTTTAG	TAGAGACGGG	GTTTCACTGT	GTTGGC CAGG	CTGGTCTCGA	
-300	ACTCCTGACC	TCACGTGAT	CGCCCTCCTC	GGCCTCCCCA	AGTGCTGAGA	
-300 ACTCCTGAC TCACGTGAT C CGCCCTCCTC GGCCTCCCCA AGTGCTGAGA TP63 SREBP-1 TP63/TP73						
-250	TTACAGGCGT		GCCCGCCGCC	CCCTGAATTT	•	
	GGAGCCTCCC					
	CTTGTTCATC					
	CCGCTGCCGG					
100	3333133333	22010101100	515155115 51	TP63		
-50	AGCGTCACGT	CCGGTCTCGG	CGGAAGTTTT			

Figure S3. ATG6/BECN1 promoter.

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-1500 GAGTTATTTC TTTTAGTTTC TTTGTTTTTG GCATGTGAAT TATGAAACTT -1450 TAAAACACCT CCAGTGCAAA AAAAATTTTT TTTAAATTAA CATGGTGGTT -1400 GGTGCACTGT GTTTCTAAAA TATGGAGTAC AATGTAAAGC AATGCATTCT -1350 TTTTTTAAAA ATTTATTGTT ATTTTGAAAA ATTTTTGTAG AGATGAGGTC -1300 TCACTGCCTT GCCCATAGCT GGTCTTGAAC TCCTGGGCTA AAGCGATCCT -1250 CCTACCTCGG GCTCCCAAAG TGCTGGGATT ACAGGCGTGA GCCACTGCGC -1200 CCAGCCGCAT TCTTGTTTTC ATCTGTGAAA TACGTTTTTA AGGTAAATAC -1150 TTAAAGTTGA TGGAGACACC TGGTCTACTT AAGCTCTCAT TCAGAACACA -1100 CTGCCTTGTG CTTTTAAAAA AATTAAATGG ATAATCTAAA TTGGCAGCTA -1050 CCAAT TAATT TATATCCATA GTTGCTAAAA AATGTTAGTG TAAGTTCATT NF-Y -1000 TTTATTAGTC GCATCATTTT GAGTTTTAAA CTATTTCACA TGCAGTAAAA -950 TTTATACCTC TTATGGGTTT TGTCAAACAG TGGTTTAGTC ACCAACACA -900 TCACGGTATA GAAGCTCTCA AGCTCCTTTT CAGTCACCCC CTTCCTCCAG TP63 -850 CCCTTTGCCC TGGTCGCCAC TGATCAGTAT TCTCTCCTTT TAAAAACACT

Figure S5. ATG10 promoter.

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-2000	AGAAAACTAA	TACAGCTTAG	AAACAGAAAT	GTGTTTTCTG	TGAAATTCCC			
-1950	CCAGATCTTG	${\tt GCACCACATG}$	AGTTCAATCA	GATAATATTT	GGGATTTCCC			
-1900	AGTGACTCCT	TTCTCAACAA	ACACCTGATC	AAGCGACTCC	${\tt TTTCTCAACA}$			
-1850	AACACCTGAC	CACACGCCC C	AGGCTCCAGC	CATG AGGAAC	CACTCAGTGT			
	TP53/TP73							
-1800	GTCAGAACAG	${\tt GAGACAGTGT}$	${\tt GACATCTTTG}$	TGATCCAGCT	$\mathtt{CTGAGAAAAG}$			
-1750	ATC CAAGGTG	TTTTTCAGG	TTCTGAACAC	CCTGGAAAGA	TAGTATGCTT			
TP73								
-1700	ACATTTTGTT	${\tt TAAAAAATTT}$	AAAATGCAAC	TACTATATGC	CAGGTCCTGT			
-1650	GTGGGCACTT	TACATATGTT	${\tt GATTTACTTT}$	AATCCCTACA	GCAATCCTAT			
-1600	TACTATTTTA	AAGCTGAGAG	${\tt AGGGGAAGTG}$	ACTTGCCTTG	GGATACATAG			
-1550	CTCAAAGGTG	GTAGAGCCAA	GATTCCAAAG	TGCCTGATTC	CTATTGTGTC			
-1500	TGACTCTAAA	ACACTATGTT	${\tt CTTTCTGCTA}$	TGTTCATCCA	GGTGGTGGAA			
-1450	AAATTCAGTC	TAGGAGTAAA	AAAAGGAAGA	TCAACATCCT	GCAGAATGAC			

Figure S6. UVRAG promoter.