

Appendix information

Liu *et al.* LINC00839 promotes colorectal cancer progression by recruiting RUVBL1/Tip60 complex to activate NRF1

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Appendix Table S1. Correlation between the Colorectal cancer features and expression of LINC00839

Clinicopathological variables	LINC00839 expression			P-value	χ^2
	Total	No. of low expression(%)	No. of high expression(%)		
Gender					
Male	130	62 (47.69)	68 (52.30)	0.889	0.02
Female	92	43 (46.73)	49 (53.26)		
Ages (years)					
≤50	60	27 (43.33)	33 (56.67)	0.677	0.174
>50	162	78 (48.76)	84 (51.23)		
Tumor site					
Proximal	43	19 (35.41)	24 (64.58)	0.517	5.925
Distal colon	52	24 (44.73)	28 (55.26)		
Rectum	127	62 (52.20)	65 (47.79)		
Tumor size (cm)					
≤5cm	138	63 (53.33)	75 (46.67)	0.529	0.396
>5cm	84	42 (60.09)	42 (39.08)		
Tumor differentiation					
Well	81	35 (66.23)	45 (33.77)	0.5142	1.33
Moderate	93	46 (47.31)	47 (52.69)		
Poor	41	24 (19.2)	25 (80.76)		
T stage					
T1-2	92	55 (61.96)	37 (38.04)	9.825	0.002
T3-4	130	50 (36.92)	80 (63.08)		
Lymph node involvement					
No	91	50 (58.82)	41 (41.17)	0.047	3.94
Yes	131	55 (39.85)	76 (60.14)		
Distant					
No	204	103 (56.86)	101 (43.13)	0.001	10.29
Yes	18	2 (33.33)	16 (66.67)		
Clinical stage					
I + II	74	43 (61.95)	31 (38.04)	0.023	5.204
III+IV	148	62 (36.92)	86 (63.07)		

Appendix Table S2. Sequences of shRNA used in this study

Gene	primer
LINC00839-Homo-37	5'-AAAUGCGGAAAGCCCACGGTT-3'
LINC00839-Homo-747#1	5'-AUUUCAGGUGUCUUGAUGGTT-3'
LINC00839-Homo-952#2	5'-AUUGUAGCUGGUCAUCCGCTT-3'
LINC00839-Homo-1112	5'-JUUAUGGUCAGUUUAAGGCTT-3'
RVB1#1	5'-UGCCGUGGCUGAGGCUCAUTT -3'
RVB1#2	5'-CCACAGAATTCGACCUAGA-3'
NRF1#1	5'-UUAAGCGCCAUAUGUGACUG-3'
NRF1#2	5'-AGUUUCCGAAGCAAACGUG-3'

Appendix table S3. Primer pairs used in this study

Gene	primer
LINC00839-F	5'-ATGTGACGTGCTCCTGATGG-3'
LINC00839-R	5'-CAGGCCACTCATGCTGTTGT-3'
GAPDH-F	5'-ACAGTCAGCCGCATCTTCTT-3'
GAPDH-R	5'-GACAAGCTTCCCGTTCTCAG-3'
NRF1-1-F	5'-AAACCTCTGAAGCGCTCCGT-3'
NRF1-1-R	5'-CCATGATGAGGAGGTCGGC-3'
NRF1-2-F	5'-GAGAGATGCCACTCGTCTGA-3'
NRF1-2-R	5'-CGGAACCTCAAAGCAACTGG-3'
NRF1-3-F	5'-AGATAGGAAAGCAGAGGTCATTTC-3'
NRF1-3-R	5'-CAAGTGGTTCCCCTCTGGTTTT-3'
NRF1-4-F	5'-TGCTTCGAATAAGCTCCGTG-3'
NRF1-4-R	5'-CGTGCTGTGCCAGATATTGT-3'
NRF1-5-F	5'-GGGTCCCAGGACTCAAACA-3'
NRF1-5-R	5'-GGCAGAGGGGTCGTTTTTGT-3'
NRF1-6-F	5'-GTTAATCCGTTTTCTGACACCCT-3'
NRF1-6-R	5'-GCTTGTTTGCCCTAGGAACCTG-3'
NRF1-7-F	5'-GGATCATTTCAGGTTTCTGGC-3'
NRF1-7-R	5'-TCCAGTGTTTTCTAGGAGAGTGC-3'
NRF1-8-F	5'-TGGAGAGGGCAATTTCCGGTG-3'
NRF1-8-R	5'-GCACCCAGCCCAATTAGA-3'
NRF1-9-F	5'-ATCACCAATGGCCCTGTAGC-3'
NRF1-9-R	5'-TCCACTACAGCTTGAATGGTCT-3'
NRF1-10-F	5'-AACAGTTGTGAGGTGGCACA-3'
NRF1-10-R	5'-TGACCTCATCTGCCACAGATATT-3'
LINC00839-1-F	5'-GATATCTAGTTAAATAAGTCATTATAAATAGTTGCTCC-3'
LINC00839-1-R	5'-CATGACAAGATTTTCAGGTGTCTTG-3'
LINC00839-2-F	5'-TAATACGACTCACTATAGGGAGCCAGATACTGAGGAAGAGATTTTGG-3'
LINC00839-2-R	5'-AGACCCCAACCCAGTGGTG-3'
LINC00839-3-F	5'-TAATACGACTCACTATAGGGCCTTGACCAAGCTGGTCT-3'
LINC00839-3-R	5'-TTTTTTTTTTTTTTTTTTAGAGGTGTCAAGTG-3'
LINC00839-4-F	5'-TAATACGACTCACTATAGGGAGCCAGATACTGAGGAAGAGATTTTGG-3'
LINC00839-4-R	5'-TCGTCATGGTGGGCTACTTCTC-3'
LINC00839-5-F	5'-TAATACGACTCACTATAGGGAGCTGCCTTTGCTTTTATCGCT-3'
LINC00839-5-R	5'-TGTTGTTAAGGCTCAGGCCACT-3'
LINC00839-6-F	5'-TAATACGACTCACTATAGGGTGTTTTTGCTGCAGATAATCGGC-3'
LINC00839-6-R	5'-AGACCCCAACCCAGTGGTG-3'

Appendix table S4. ChiRP-Probe

ChiRP-LINC00839-Probe	ChiRP-LacZ-Probe	ChiRP-TERCProbe
ACGCTGCCTGGAGCAGGGTG-bio	CTGAATATCGACGGTTTCCA-bio	CAGGCCACCCCTCCGCAACC-bio
CAGTTCTCTTCCTTCTCCTC-bio	GCTGTATCGCTGGATCAAAT-bio	GCAAAAGCACGGCGCCTACG-bio
GGTTCTGGGAGGAGGCGCAG-bio	GTCGTTTTACAACGTCGTGA-bio	CTCTAGAATGAACGGTGGAA-bio
GCTGTTGCTGCGTCACTGCC-bio		GCCTCCAGGCGGGGTTCCGG-bio
CCCAACCCAGTAGTGCCTCG-bio		GGCTGACAGAGCCCAACTCT-bio
AAGAGTACTCTGGTGCCTC-bio		GGGACTCGTCCGTTCTCT-bio
TGTCAGTCTTGACATGGCTG-bio		CAGGAAAGCGAACTGCATGT-bio
CTCATTGTAGCTGGTCATCC-bio		AGGTTTGGGGTTCACAAGC-bio
ATGACAGGCTTAGGGCCTGT-bio		
CCAGGTGTTCCCTACCCTGC-bio		
GCATACTTAGAGAGGAGTAG-bio		
AGTGCAAAGTGGGAATCAGG-bio		
TACCCACAGGCTCCACAAGG-bio		
GTGCAGGTCCACTTACAGAG-bio		
CCTGCTCCCAACAGCCCTCA-bio		
CCAGGTGTTCCCTGCCCTCA-bio		
GAAACGAAGGGATGGACTGA-bio		
GGTCTCACAGCCTTCAGAGT-bio		