

SUPPLEMENTARY TABLES

Supplementary Table 1. Primers for RT-qPCR experiments of 11 ARlncRNAs.

| Gene | Forward primer | Reverse primer |
|------------|----------------------|-----------------------|
| AL031602.2 | ATCTTCCCTGTACCTCCCTT | CTGGGACATTCACACGGATG |
| BZW1-AS1 | AGGACACAGGCCGAAGATTG | CACACTCGGGAGACAACCG |
| AC021087.1 | CTCGAGCAGGGACGTATCAC | AAAGGGCAAGATAACGGCCA |
| GLIS2-AS1 | TGCTAATTACTGCGGGGTCC | AAACTGAGGAACGGAAGGCTC |
| ABCA9-AS1 | TCCAGTGTCTGCACCAGTT | TGGCCCAACGTCTAATAGGG |
| AL606489.1 | TCCTTTATCGGGCAAGAGGC | TGGGTGCAATGAGAGTGCAT |
| ZNF571-AS1 | CGCCATCCCCTTTTCCTCTT | CGGTCCAAAGGTTCTCCGAA |
| LINC02310 | GGGATAAATCCTCCCTGCC | TCAGTTTTGCAGAAGGGGCT |
| AL162632.3 | TGGCCGTAAAGTAAAACCCT | TCGGCCCAAAGGAGAAGAAA |
| LINC01117 | CCCCGTGCTCGTTACAATCT | CTCCGGGGTTACTGGAGTCT |
| HAS2-AS1 | CCCGTTCTCACCCCTCATA | GAATTCGTCACGGCAGTTCC |

Abbreviation: ARlncRNAs, anoikis-related lncRNAs; RT-qPCR, Reverse transcription quantitative-polymerase chain reaction.

Supplementary Table 2. The 148 ARlncRNAs connected with the over survival of the LUAD patients screened after univariate Cox analysis in training cohort (P<0.05).

| Gene | HR | HR (95% CI) | P-value | Gene | HR | HR (95% CI) | P-value |
|-------------|------|-------------|---------|------------|------|-------------|---------|
| MIR4435-2HG | 1.68 | (1.17,2.42) | 0.005 | AL445309.1 | 0.59 | (0.39,0.91) | 0.016 |
| AC103681.2 | 0.29 | (0.10,0.81) | 0.018 | AC092718.4 | 1.45 | (1.15,1.85) | 0.002 |
| AC107308.1 | 1.30 | (1.05,1.61) | 0.016 | Z97989.1 | 0.61 | (0.38,0.98) | 0.042 |
| TSPOAP1-AS1 | 0.65 | (0.44,0.98) | 0.039 | AC026356.1 | 1.34 | (1.03,1.76) | 0.030 |
| AC039056.2 | 1.40 | (1.05,1.88) | 0.022 | ABCA9-AS1 | 2.10 | (1.14,3.87) | 0.017 |
| LINC01863 | 0.68 | (0.48,0.96) | 0.027 | C2orf27A | 1.50 | (1.06,2.13) | 0.023 |
| CYP1B1-AS1 | 0.51 | (0.27,0.96) | 0.038 | AC079313.2 | 2.46 | (1.47,4.13) | 0.001 |
| AL109615.4 | 0.71 | (0.54,0.94) | 0.017 | SMILR | 1.60 | (1.19,2.15) | 0.002 |
| AC087501.4 | 0.43 | (0.25,0.75) | 0.003 | AC116407.1 | 0.80 | (0.64,0.99) | 0.045 |
| AC092279.1 | 0.73 | (0.56,0.96) | 0.022 | AC006116.9 | 0.21 | (0.05,0.88) | 0.033 |
| AC022148.2 | 0.30 | (0.10,0.90) | 0.032 | GMDS-DT | 0.40 | (0.20,0.80) | 0.009 |
| ZKSCAN7-AS1 | 0.59 | (0.38,0.92) | 0.021 | LINC01116 | 1.28 | (1.09,1.49) | 0.002 |
| AC009509.4 | 1.75 | (1.17,2.63) | 0.007 | AC092574.1 | 0.65 | (0.45,0.93) | 0.020 |
| CACTIN-AS1 | 2.48 | (1.04,5.92) | 0.041 | AL606489.1 | 1.43 | (1.16,1.77) | 0.001 |
| AC090948.1 | 0.72 | (0.53,0.98) | 0.034 | DEPDC1-AS1 | 4.28 | (1.89,9.66) | <0.001 |
| AC090023.2 | 1.85 | (1.24,2.75) | 0.003 | AL449423.1 | 1.67 | (1.03,2.72) | 0.037 |
| LINC01138 | 1.42 | (1.00,2.00) | 0.047 | AL691432.2 | 0.62 | (0.47,0.84) | 0.002 |
| AC018529.1 | 0.58 | (0.34,0.98) | 0.042 | ZNF571-AS1 | 0.63 | (0.41,0.97) | 0.035 |
| AC011477.2 | 0.70 | (0.54,0.92) | 0.009 | RASAL2-AS1 | 1.56 | (1.01,2.40) | 0.043 |
| AC007552.2 | 0.77 | (0.61,0.97) | 0.024 | AL157895.1 | 0.48 | (0.25,0.94) | 0.032 |
| SH3BP5-AS1 | 0.75 | (0.58,0.97) | 0.027 | AL358115.1 | 1.60 | (1.03,2.49) | 0.035 |
| SNHG14 | 0.67 | (0.45,0.99) | 0.042 | AC025171.2 | 0.74 | (0.57,0.97) | 0.029 |
| APCDD1L-DT | 1.53 | (1.20,1.94) | 0.001 | AC112721.1 | 1.34 | (1.01,1.77) | 0.040 |
| AC124242.1 | 0.51 | (0.29,0.89) | 0.019 | DAAM2-AS1 | 0.40 | (0.18,0.91) | 0.029 |
| AC027031.2 | 1.37 | (1.09,1.72) | 0.006 | AC010615.2 | 0.79 | (0.62,1.00) | 0.047 |
| CYTOR | 1.62 | (1.11,2.36) | 0.013 | TMEM30A-DT | 0.27 | (0.11,0.68) | 0.006 |
| ADAMTS9-AS2 | 0.47 | (0.25,0.89) | 0.020 | AL137009.1 | 0.64 | (0.43,0.94) | 0.021 |

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|------------|------|-------------|--------|-------------|------|--------------|--------|
| AC003991.1 | 0.57 | (0.33,0.98) | 0.041 | AL359220.1 | 0.58 | (0.36,0.93) | 0.022 |
| LINC00520 | 1.80 | (1.20,2.69) | 0.004 | ZNF32-AS2 | 0.73 | (0.54,0.99) | 0.045 |
| LINC00460 | 1.18 | (1.02,1.37) | 0.026 | AC125807.2 | 1.33 | (1.01,1.74) | 0.041 |
| AC107021.2 | 1.25 | (1.00,1.57) | 0.047 | LINC02310 | 2.75 | (1.83,4.14) | <0.001 |
| AL008729.2 | 0.80 | (0.66,0.97) | 0.025 | AC138965.1 | 1.63 | (1.07,2.48) | 0.023 |
| AL031602.2 | 0.53 | (0.36,0.78) | 0.001 | STXBP5-AS1 | 2.45 | (1.11,5.42) | 0.027 |
| BZW1-AS1 | 2.43 | (1.58,3.74) | <0.001 | AC034223.2 | 1.53 | (1.28,1.85) | <0.001 |
| AC008937.3 | 0.46 | (0.23,0.93) | 0.030 | AP005264.1 | 1.91 | (1.21,3.03) | 0.006 |
| AC100810.3 | 1.68 | (1.15,2.47) | 0.007 | AP005717.2 | 2.35 | (1.01,5.48) | 0.047 |
| LINC02728 | 0.43 | (0.21,0.90) | 0.025 | AC010343.3 | 1.54 | (1.07,2.21) | 0.019 |
| AC092718.5 | 0.58 | (0.38,0.91) | 0.017 | AC024075.1 | 0.76 | (0.6,0.97) | 0.025 |
| AC021087.1 | 0.57 | (0.38,0.84) | 0.005 | AL162632.3 | 2.96 | (1.22,7.18) | 0.016 |
| AC084048.1 | 0.45 | (0.21,0.97) | 0.042 | AC024075.3 | 0.72 | (0.53,0.97) | 0.031 |
| AC004540.2 | 0.59 | (0.37,0.94) | 0.026 | AC091057.1 | 1.35 | (1.03,1.78) | 0.030 |
| AC021087.3 | 0.58 | (0.37,0.93) | 0.023 | AC022210.1 | 1.53 | (1.09,2.15) | 0.013 |
| AL137186.2 | 1.73 | (1.04,2.86) | 0.034 | AC090409.1 | 1.88 | (1.00,3.55) | 0.050 |
| GLIS2-AS1 | 0.62 | (0.45,0.84) | 0.002 | ZNF790-AS1 | 0.62 | (0.42,0.92) | 0.017 |
| LINC02848 | 0.06 | (0.01,0.74) | 0.028 | AL356608.1 | 0.13 | (0.03,0.56) | 0.006 |
| TMPO-AS1 | 1.38 | (1.02,1.86) | 0.034 | LINC01117 | 1.88 | (1.41,2.50) | <0.001 |
| AL354953.1 | 1.31 | (1.11,1.55) | 0.002 | AC008870.2 | 0.73 | (0.53,0.99) | 0.045 |
| STEAP2-AS1 | 1.76 | (1.13,2.73) | 0.012 | AC108136.1 | 1.97 | (1.37,2.83) | <0.001 |
| ZRANB2-AS2 | 0.17 | (0.04,0.74) | 0.018 | AL353804.1 | 0.73 | (0.56,0.96) | 0.026 |
| AC091435.2 | 0.61 | (0.38,0.99) | 0.047 | AL139351.3 | 1.77 | (1.23,2.55) | 0.002 |
| AC124045.1 | 0.67 | (0.46,1.00) | 0.048 | ASB16-AS1 | 0.69 | (0.47,0.99) | 0.046 |
| RMDN2-AS1 | 0.58 | (0.35,0.96) | 0.034 | LINC01537 | 2.40 | (1.60,3.60) | <0.001 |
| AP000864.1 | 2.22 | (1.11,4.43) | 0.024 | AC006058.3 | 1.57 | (1.15,2.16) | 0.005 |
| AC026355.2 | 0.81 | (0.67,0.98) | 0.034 | AC123595.2 | 0.61 | (0.41,0.90) | 0.014 |
| AC092640.1 | 1.94 | (1.12,3.36) | 0.018 | AC005865.2 | 1.40 | (1.05,1.88) | 0.024 |
| AL138689.1 | 1.37 | (1.06,1.77) | 0.018 | HAS2-AS1 | 5.20 | (2.48,10.92) | <0.001 |
| AC084781.1 | 2.79 | (1.20,6.47) | 0.017 | AC092329.4 | 0.53 | (0.33,0.87) | 0.011 |
| AL031778.1 | 0.64 | (0.44,0.92) | 0.017 | AP000695.1 | 1.53 | (1.23,1.91) | <0.001 |
| AP000695.2 | 1.48 | (1.16,1.88) | 0.001 | AL138921.2 | 0.66 | (0.44,0.98) | 0.039 |
| AC135050.6 | 0.60 | (0.44,0.82) | 0.001 | AL138789.1 | 1.53 | (1.15,2.02) | 0.003 |
| AL109811.2 | 0.61 | (0.44,0.84) | 0.003 | AC025419.1 | 1.51 | (1.15,1.98) | 0.003 |
| LINC01711 | 1.40 | (1.13,1.74) | 0.002 | AC024909.1 | 0.61 | (0.38,0.98) | 0.041 |
| TRMT2B-AS1 | 0.56 | (0.34,0.94) | 0.028 | AC068580.2 | 1.41 | (1.00,1.98) | 0.047 |
| MANCR | 1.68 | (1.34,2.10) | <0.001 | AL355075.2 | 0.76 | (0.59,0.98) | 0.035 |
| AL139424.3 | 0.42 | (0.18,0.95) | 0.037 | NAGPA-AS1 | 0.64 | (0.42,0.98) | 0.042 |
| AC127024.5 | 0.69 | (0.50,0.97) | 0.030 | HCG18 | 0.53 | (0.34,0.85) | 0.007 |
| AL158068.2 | 1.95 | (1.02,3.70) | 0.042 | AL391261.1 | 2.08 | (1.33,3.26) | 0.001 |
| NIPBL-DT | 0.69 | (0.50,0.95) | 0.023 | MAP3K4-AS1 | 1.55 | (1.09,2.21) | 0.016 |
| AC016735.1 | 1.37 | (1.03,1.82) | 0.030 | AL359643.2 | 0.26 | (0.08,0.91) | 0.035 |
| AC019205.1 | 0.56 | (0.32,0.97) | 0.038 | AC114781.2 | 0.45 | (0.24,0.84) | 0.013 |
| LINC01385 | 1.33 | (1.03,1.72) | 0.029 | AC060780.1 | 0.70 | (0.50,0.97) | 0.033 |
| AC034102.8 | 0.62 | (0.41,0.92) | 0.019 | AL590729.1 | 0.57 | (0.35,0.92) | 0.022 |
| DIRC3 | 2.27 | (1.20,4.30) | 0.012 | SEPSECS-AS1 | 0.62 | (0.39,0.99) | 0.045 |
| MIR31HG | 1.54 | (1.30,1.81) | <0.001 | LINC02582 | 1.41 | (1.11,1.78) | 0.005 |

Abbreviation: ARlncRNAs, anoikis-related lncRNAs; CI, Confidence interval; HR, Hazard ratios; LUAD, Lung adenocarcinoma.

Supplementary Table 3. 11 ARlncRNAs connected with the over survival of the LUAD patients after multivariate Cox analysis in training cohort.

| Gene | HR | HR (95% CI) | Coef | P-value |
|-------------|-----------|--------------------|--------------------|----------------|
| AL031602.2 | 0.49 | (0.32,0.77) | -0.710450178205890 | 0.002 |
| BZW1-AS1 | 1.54 | (0.93,2.54) | 0.432038348321673 | 0.092 |
| AC021087.1 | 0.62 | (0.41,0.94) | -0.476411291926875 | 0.025 |
| GLIS2-AS1 | 0.64 | (0.46,0.87) | -0.454008732783369 | 0.005 |
| ABCA9-AS1 | 2.72 | (1.31,5.63) | 0.999706491359515 | 0.007 |
| AL606489.1 | 1.30 | (1.03,1.63) | 0.259835252523394 | 0.025 |
| ZNF571-AS1 | 0.71 | (0.44,1.12) | -0.348748604018090 | 0.139 |
| LINC02310 | 2.12 | (1.24,3.62) | 0.750892025449650 | 0.006 |
| AL162632.3 | 3.73 | (1.43,9.72) | 1.315573571091090 | 0.007 |
| LINC01117 | 1.40 | (1.03,1.90) | 0.338762422003907 | 0.029 |
| HAS2-AS1 | 2.17 | (0.93,5.05) | 0.775846321855369 | 0.072 |

Abbreviations: ARlncRNAs, anoikis-related lncRNAs; CI, Confidence interval; Coef, Coefficient; HR, Hazard ratios; LUAD, Lung adenocarcinoma.