**Supplementary Table 5. Results of MYC silencing on gene and protein expression in ACP02 and ACP03.**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Variables** | ***n*, 213 (%)**  | **TTLL12** **immunoreactivity** | ***TTLL12* mRNA** | **TTLL12 protein** | **CDKN3** **immunoreactivity** | ***CDKN3* mRNA** | **CDKN3protein**  | **CDC16** **immunoreactivity** | ***CDC16* mRNA** | **CDC16protein**  |
| **N (%) of** **positives** **cases** | ***p*-valuea** | **RQ(median ± IQR)** | ***p*-valueb** | **Ratio T/N** **(median ± IQR)** | ***p*-valueb** | **N (%) of** **positives** **cases** | ***p*-valuea** | **RQ(median ± IQR)** | ***p*-valueb** | **Ratio T/N** **(median ± IQR)** | ***p*-valueb** | **N (%) of** **positives** **cases** | ***p*-valuea** | **RQ(median ± IQR)** | ***p*-valueb** | **Ratio T/N** **(median ± IQR)** | ***p*-valueb** |
| **Gender** | **Female** | **80 (37.6)** | 36 (33.0) | 0.477 | 1.40 ± 0.57 | 0.349 | 1.26 ± 0.63 | 0.588 | 79 (38.0) | < 0.001\* | 1.48 ± 0.28 | 0.969 | 1.25 ± 0.22 | 0.386 | 48 (42.5) | 0.180 | 1.67 ± 0.58 | 0.117 | 1.48 ± 0.62 | 0.042 |
| **Male** | **133 (62.4)** | 73 (67.0) | 1.43 ± 0.76 | 1.44 ± 0.67 | 129 (62.0) | 1.48 ± 0.28 | 1.23 ± 0.25 | 65 (57.5) | 1.61 ± 0.50 | 1.40 ± 0.52 |
| **Age (years)** | **< 50 years** | **55 (25.8)** | 32 (29.4) | 0.564 | 1.51 ± 0.73 | 0.316 | 1.47 ± 0.59 | 0.359 | 53 (25.5) | < 0.001\* | 1.36 ± 0.22 | 0.001 | 1.21 ± 0.26 | 0.136 | 22 (19.5) | 0.045 | 1.49 ± 0.47 | 0.005 | 1.29 ± 0.46 | 0.007 |
| **≥ 50 years** | **158 (74.2)** | 77 (70.6) | 1.41 ± 0.66 | 1.26 ± 0.69 | 155 (74.5) | 1.49 ± 0.27 | 1.24 ± 0.25 | 91 (80.5) | 1.68 ± 0.55 | 1.47 ± 0.64 |
| **Tumor location** | **Cardia** | **75 (35.2)** | 46 (42.2) | 0.100 | 1.50 ± 0.65 | 0.138 | 1.45 ± 0.55 | 0.053 | 74 (35.6) | < 0.001\* | 1.46 ± 0.22 | 0.052 | 1.22 ± 0.26 | 0.892 | 35 (31.0) | 0.808 | 1.51 ± 0.65 | 0.116 | 1.44 ± 0.56 | 0.847 |
| **Non-cardia** | **138 (64.8)** | 63 (57.8) | 1.40 ± 0.64 | 1.22 ± 0.71 | 134 (64.4) | 1.49 ± 0.27 | 1.23 ± 0.23 | 78 (69.0) | 1.68 ± 0.50 | 1.43 ± 0.62 |
| **Histological type** | **Diffuse** | **103 (48.4)** | 93 (85.3) | < 0.001\* | 1.78 ± 0.47 | < 0.001\* | 1.70 ± 0.36 | < 0.001\* | 100 (48.1) | 0.579 | 1.48 ± 0.27 | 0.123 | 1.22 ± 0.24 | 0.241 | 45 (39.8) | 0.020\* | 1.55 ± 0.55 | 0.062 | 1.37 ± 0.50 | 0.015\* |
| **Intestinal** | **110 (51.6)** | 16 (14.7) | 1.11 ± 0.33 | 1.08 ± 0.25 | 108 (51.9) | 1.49 ± 0.28 | 1.25 ± 0.23 | 68 (60.2) | 1.66 ± 0.51 | 1.50 ± 0.63 |
| **Stage** | **Early** | **20 (9.3)** | 15 (13.8) | 0.128 | 1.51 ± 0.57 | < 0.001\* | 1.65 ± 0.47 | 0.053 | 19 (9.1) | < 0.001\* | 1.08 ± 0.33 | < 0.001\* | 0.99 ± 0.18 | < 0.001\* | 0 (0.0) | < 0.001\* | 1.20 ± 0.21 | < 0.001\* | 1.11 ± 0.18 | < 0.001\* |
| **Advanced** | **193 (89.4)** | 94 (86.2) | 1.41 ± 0.68 | 1.31 ± 0.66 | 189 (90.9) | 1.49 ± 0.27 | 1.25 ± 0.23 | 113 (100.0) | 1.68 ± 0.54 | 1.48 ± 0.61 |
| **Tumor invasion** | **T1/T2** | **68 (31.9)** | 53 (48.6) | 0.003\* | 1.67 ± 0.74 | < 0.001\* | 1.69 ± 0.61 | < 0.001\* | 67 (32.2) | < 0.001\* | 1.30 ± 0.16 | < 0.001\* | 1.14 ± 0.20 | < 0.001\* | 10 (8.8) | < 0.001\* | 1.41 ± 0.39 | < 0.001\* | 1.27 ± 0.29 | < 0.001\* |
| **T3/T4** | **145 (68.1)** | 56 (51.4) | 1.38 ± 0.60 | 1.18 ± 0.60 | 141 (67.8) | 1.57 ± 0.12 | 1.28 ± 0.22 | 103 (91.2) | 1.73 ± 0.57 | 1.56 ± 0.65 |
| **Lymph node metastasis** | **Absent** | **23 (10.8)** | 17 (15.6) | 0.356 | 1.65 ± 0.38 | 0.177 | 1.45 ± 0.33 | 0.744 | 23 (11.1) | < 0.001\* | 1.31 ± 0.20 | 0.004\* | 1.13 ± 0.20 | 0.033\* | 0 (0.0) | 0.003\* | 1.33 ± 0.22 | < 0.001\* | 1.13 ± 0.22 | < 0.001\* |
| **Present** | **190 (89.2)** | 92 (84.4) | 1.40 ± 0.67 | 1.30 ± 0.69 | 185 (88.9) | 1.49 ± 0.27 | 1.25 ± 0.24 | 113 (100.0) | 1.68 ± 0.55 | 1.49 ± 0.62 |
| **Distant metastasis** | **Absent (M0)** | **108 (50.7)** | 52 (47.7) | 0.019\* | 1.41 ± 0.64 | 0.538 | 1.29 ± 0.64 | 0.021\* | 107 (51.4) | 0.677 | 1.47 ± 0.24 | 0.002\* | 1.22 ± 0.23 | 0.453 | 35 (31.0) | 0.660 | 1.48 ± 0.33 | < 0.001\* | 1.26 ± 0.32 | < 0.001\* |
| **Present (M1)** | **105 (49.3)** | 57 (52.3) | 1.45 ± 0.74 | 1.52 ± 0.76 | 101 (48.6) | 1.56 ± 0.27 | 1.24 ± 0.24 | 78 (69.0) | 1.84 ± 0.52 | 1.77 ± 0.68 |
| **Survival 5 year** | **Negative** | **148 (69.5)** | 73 (67.0) | 0.182 | 1.40 ± 0.59 | 0.003\* | 1.28 ± 0.63 | 0.194 | 144 (69.2) | < 0.001\* | 1.50 ± 0.27 | < 0.001\* | 1.28 ± 0.22 | < 0.001\* | 92 (81.4) | < 0.001\* | 1.70 ± 0.54 | < 0.001\* | 1.49 ± 0.63 | 0.001\* |
| **Positive** | **65 (30.5)** | 36 (33.0) | 1.59 ± 0.81 | 1.55 ± 0.72 | 64 (30.8) | 1.36 ± 0.22 | 1.13 ± 0.19 | 21 (18.6) | 1.44 ± 0.43 | 1.29 ± 0.43 |
| ***H. pylori* infection** | **Negative** | **23 (10.8)** | 13 (11.9) | 0.172 | 1.52 ± 0.50 | 0.364 | 1.50 ± 0.67 | 0.145 | 22 (10.6) | < 0.001\* | 1.48 ± 0.27 | 0.769 | 1.22 ± 0.27 | 0.711 | 12 (10.6) | 0.724 | 1.51 ± 0.58 | 0.168 | 1.45 ± 0.76 | 0.437 |
| **Positive** | **190 (89.2)** | 96 (88.1) | 1.41 ± 0.68 | 1.32 ± 0.65 | 186 (89.4) | 1.48 ± 0.28 | 1.23 ± 0.24 | 101 (89.4) | 1.64 ± 0.51 | 1.43 ± 0.58 |
| ***H. pylori* CagA** | **Negative** | **73 (34.3)** | 43 (39.4) | 0.409 | 1.49 ± 0.68 | 0.228 | 1.55 ± 0.70 | 0.890 | 72 (34.6) | < 0.001\* | 1.48 ± 0.27 | 0.464 | 1.23 ± 0.24 | 0.473 | 37 (32.7) | 0.733 | 1.55 ± 0.45 | 0.097 | 1.45 ± 0.45 | 0.738 |
| **Positive** | **140 (65.7)** | 66 (60.6) | 1.40 ± 0.67 | 1.24 ± 0.63 | 136 (65.4) | 1.49 ± 0.28 | 1.25 ± 0.24 | 76 (67.3) | 1.68 ± 0.57 | 1.42 ± 0.62 |
| **EBV** | **Negative** | **178 (83.6)** | 92 (84.4) | 0.880 | 1.42 ± 0.65 | 0.976 | 1.39 ± 0.62 | 0.425 | 173 (83.2) | < 0.001\* | 1.48 ± 0.28 | 0.688 | 1.23 ± 0.25 | 0.927 | 91 (80.5) | 0.940 | 1.60 ± 0.49 | 0.316 | 1.42 ± 0.53 | 0.127 |
| **Positive** | **35 (16.4)** | 17 (15.6) | 1.44 ± 0.73 | 1.19 ± 0.79 | 35 (16.8) | 1.49 ± 0.27 | 1.22 ± 0.22 | 22 (19.5) | 1.69 ± 0.70 | 1.60 ± 0.82 |

**a***p* value by χ2 test; **b***p* value by Mann-Whitney test. \**p*<0.05, significantly different between groups. n: number of samples; RQ: relative quantification, in which the matched non-neoplastic sample was designated as a calibrator from each neoplastic samples; T/N: the ratio of protein expression between neoplastic and matched non-neoplastic samples; IQR: interquartile range; CagA gene: Virulence factor cytotoxicity-associated gene A; EBV: Epstein-Barr virus. The patients' survival time was determined by the time interval between the date of surgery and the date of death.