**Table S1.** Distributions of characteristics among male ESCC patients in Chinese populations used for study.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Characteristics** | | **Suzhou population** | |  | **Guangzhou population** | |  | **Overall** | |
| **N** | **(%)** |  | **N** | **(%)** |  | **N** | **(%)** |
| **Sex** | |  |  |  |  |  |  |  |  |
|  | Male | 281 | (100) |  | 288 | (100) |  | 569 | (100) |
| **Age(years)** | |  |  |  |  |  |  |  |  |
|  | ≤40 | 9 | (3.2) |  | 8 | (2.8) |  | 17 | (3.0) |
|  | 40-60 | 135 | (48.0) |  | 153 | (53.1) |  | 288 | (50.6) |
|  | ≥60 | 137 | (48.8) |  | 127 | (44.1) |  | 264 | (46.4) |
| **Body mass index** | |  |  |  |  |  |  |  |  |
|  | ≤20 | 61 | (21.7) |  | 47 | (16.3) |  | 108 | (19.0) |
|  | 20-28 | 200 | (71.2) |  | 225 | (78.1) |  | 425 | (74.7) |
|  | ≥28 | 20 | (7.1) |  | 16 | (5.6) |  | 36 | (6.3) |
| **Family history** | |  |  |  |  |  |  |  |  |
|  | Positive | 23 | (8.2) |  | 39 | (13.5) |  | 62 | (10.9) |
|  | Negative | 258 | (91.8) |  | 249 | (86.5) |  | 507 | (89.1) |
| **Smoking** | |  |  |  |  |  |  |  |  |
|  | Positive | 184 | (65.5) |  | 200 | (69.4) |  | 384 | (67.5) |
|  | Negative | 97 | (34.5) |  | 88 | (30.6) |  | 185 | (32.5) |
| **Drinking** | |  |  |  |  |  |  |  |  |
|  | Positive | 131 | (46.6) |  | 143 | (49.7) |  | 274 | (48.2) |
|  | Negative | 150 | (53.4) |  | 145 | (50.3) |  | 295 | (51.8) |
| **Pathological type** | |  |  |  |  |  |  |  |  |
|  | Highly differentiated | 50 | (17.8) |  | 52 | (18.0) |  | 102 | (17.9) |
|  | Moderately differentiated | 156 | (55.5) |  | 165 | (57.3) |  | 321 | (56.4) |
|  | Low differentiated | 75 | (26.7) |  | 71 | (24.7) |  | 146 | (25.7) |
| **Stage** | |  |  |  |  |  |  |  |  |
|  | I | 21 | (7.5) |  | 24 | (8.3) |  | 45 | (7.9) |
|  | II | 133 | (47.3) |  | 141 | (49.0) |  | 274 | (48.2) |
|  | III | 127 | (45.2) |  | 123 | (42.7) |  | 250 | (43.9) |

|  |  |  |
| --- | --- | --- |
| **qPCR primers** | | |
|  | **Forward primers sequence** | **Reverse primers sequence** |
| LINC00278 | AGCCAGCCAGGAGTGAAGA | GCAGACCTTGAGTGGTTGTAG |
| TTTY15 | GGTGGTTCAATGCCTGTA | GGTTCAAGCGATTCTCCT |
| TTTY14 | AATGGCTGTGACGGATAAG | TTGCGGAGGACTACTGAG |
| TTTY10 | ACTGATTGCTACCTGTTACC | ATTCGCTATTGTGTCTCTGT |
| TTTY3 | ACAAGCAACCAAGTCCAA | TCTTCCAGTCTGTTCCTCT |
| METTL3 | GAGGAGTGCATGAAAGCCAG | GGCCTCAGAATCCATGCAAG |
| METTL14 | GACGGGGACTTCATTCATGC | CCAGCCTGGTCGAATTGTAC |
| WTAP | CTTCCCAAGAAGGTTCGATTGA | TCAGACTCTCTTAGGCCAGTTAC |
| ALKBH5 | ACCCCATCCACATCTTCGAG | CTTGATGTCCTGAGGCCGTA |
| FTO | AGACACCTGGTTTGGCGATA | CCAAGGTTCCTGTTGAGCAC |
| YTHDF1 | ATGTCGGCCACCAGCGTGGACA | TCATTGTTTGTTTCGACTCTGC |
| YY1 | GACCTCTCAGATCCCAAA | TTGTTTTTGGCCTTAGCA |
| HPRT1 | CTTTGCTGACCTGCTGGATT | TCCCCTGTTGACTGGTCATT |
| circHIPK3 | TCGGCCAGTCATGTATCAAA | ACCAAGACTTGTGAGGCCAT |
| β-actin | CATGTACGTTGCTATCCAGGC | CTCCTTAATGTCACGCACGAT |
| **ChIP primers** | | |
|  | **Forward primers sequence** | **Reverse primers sequence** |
| C1 | CAAAGTGCTGGGAAGATGGAAT | ATGAGTGGTAGAGTGGCTAAGG |
| C2 | CAATCGTCATACGTGCCTGTT | GCCTGCTTCTCGCTTAGTTC |
| C3 | AGCAGGAGAACCGGACACT | TGGTCTAGGTTGAGCAGAAGC |
| C4 | CCCTGGGATCGGTCCATCTA | AGAGGAGTTGGCAGAGGCT |
| **LINC00278 Northern primers** | | |
|  | **Forward primers sequence** | **Reverse primers sequence** |
|  | CAGGAGTGAAGACGACAGGTT | TAATACGACTCACTATAGGG  CGCCACTGGGAATCAAGCT |
| **shRNAs** | | |
| LINC00278 | shLINC00278-#1 | SS: 5’-GGAAGTTAGAAATGTGCTA-3’  AS: 5’-TAGCACATTTCTAACTTCC-3’ |
|  | shLINC00278-#2 | SS: 5’-GATTAAGACTGTTGTTACA-3’  AS: 5’-TGTAACAACAGTCTTAATC-3’ |
| **siRNAs** | | |
|  | **siRNA-#1** | **siRNA-#2** |
| METTL3 | 5’-GCACAUCCUACUCUUGUAA-3’ | 5’-GGAGAUCCUAGAGCUAUUA-3’ |
| METTL14 | 5’-GCUAAAGGAUGAGUUAAU -3’ | 5’-GGACUUGGGAUGAUAUUAU -3’ |
| WTAP | 5’-CACAGAUCUUAACUCUAAU -3’ | 5’-GGGAAAACAUCCUUGUAAU-3’ |
| ALKBH5 | 5’-ACAAGUACUUCUUCGGCGA-3’ | 5’-GCGCCGUCAUCAACGACUA-3’ |
| FTO | 5’-UUAAGGUCCACUUCAUCAUCGCAGG-3’ | 5’-CAGGCACCUUGGAUUAUAUTT-3’ |
| YTHDF1 | 5’-CCUACGGACAGCUCAGUAATT-3’ | 5’-CCUGCUCUUCAGCGUCAAUTT-3’ |
| YY1 | 5’-GAACUCACCUCCUGAUUAU-3’ | 5’-GACGACUACAUUGAACAATT-3’ |

**Table S2.** Used Primers and shRNAs/siRNAs in This Study

**Table S3.** Characteristics of cell lines used in this study

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Species of origin | Sex of cell | LINC00278 expression | | YY1BM expression |
| TE-1 | Homo sapiens (Human) | Male | Yes | Yes | |
| KYSE-30 | Homo sapiens (Human) | Male | Yes | Yes | |
| KYSE-150 | Homo sapiens (Human) | Female | No | No | |
| Eca-109 | Homo sapiens (Human) | Female | No | No | |
| Het-1A | Homo sapiens (Human) | Male | Yes | Yes | |