

## ORIGINAL RESEARCH ARTICLE

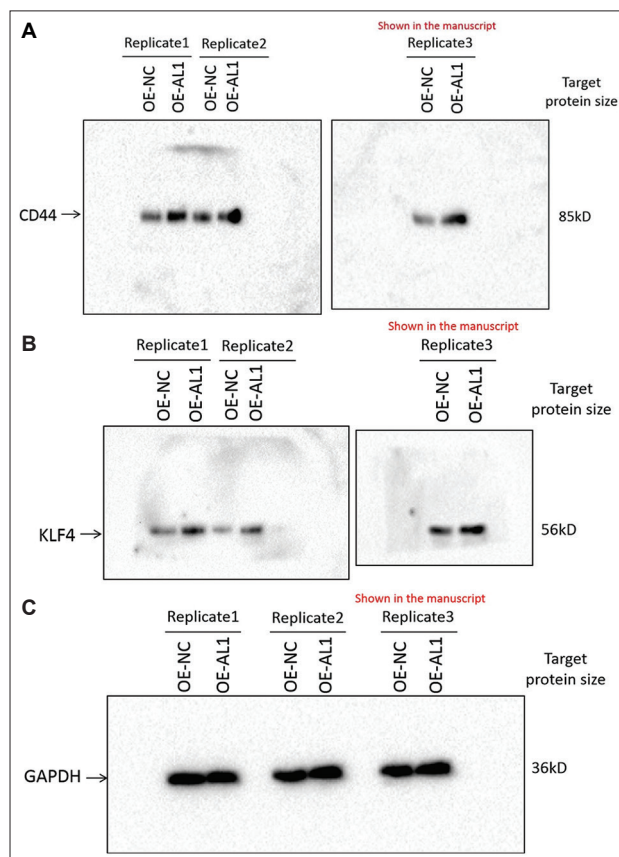
# Alkylation repair homolog 3-regulated esophageal squamous cell carcinoma associated long non-coding RNA 1 is required for maintaining the stemness of esophageal cancer

**Supplementary File**
**Table S1. Primers for qRT-PCR**

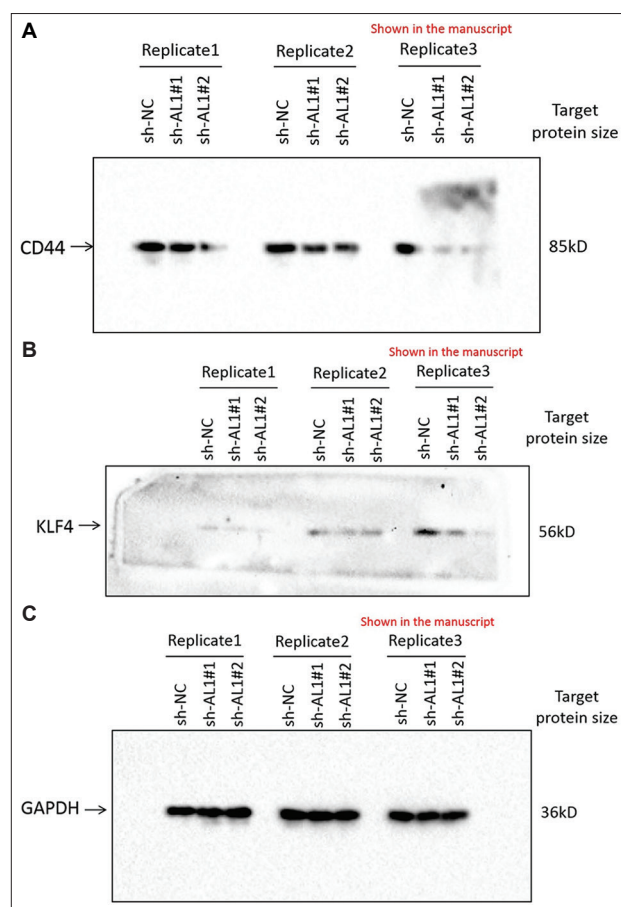
|          | Sequence (5' to 3')       |
|----------|---------------------------|
| ESCCAL-1 |                           |
| Forward  | CCAGACAGCAGCAAAGCAAT      |
| Reverse  | GGAAGCAGCAAATGTGTCCAT     |
| ALKBH3   |                           |
| Forward  | GTGCGCCTTCCTGACTTACT      |
| Reverse  | TTGGTCGTGGATAAGGGCAC      |
| GAPDH    |                           |
| Forward  | TCAGAGGACGGCATGAGACTTA    |
| Reverse  | AGCAGGACCCAGGTGTCATT      |
| CD44     |                           |
| Forward  | AGCAACTGAGACAGCAACCA      |
| Reverse  | AGACGTACCAGCCATTTGTGT     |
| SOX2     |                           |
| Forward  | TTTGTCGGAGACGGAGAAGC      |
| Reverse  | TAACTGTCCATGCGCTGGTT      |
| ALDH1A1  |                           |
| Forward  | GCACGCCAGACTTACCTGTC      |
| Reverse  | CCTCCTCAGTTGCAGGATTAAG    |
| KLF4     |                           |
| Forward  | GCGGCAAACCTACACAAAG       |
| Reverse  | CCCCGTGTGTTTACGGTAGT      |
| OCT4     |                           |
| Forward  | CGACCATCTGCCGCTTTGAG      |
| Reverse  | CCCCCTGTCCCCATTCTTA       |
| NANOG    |                           |
| Forward  | GATTTGTGGCCTGAAGAAA       |
| Reverse  | TTGGGACTGGTGAAGAATC       |
| MYC      |                           |
| Forward  | GCTGCTTAGACGCTGGATTT      |
| Reverse  | CTCCTCCTCGTCGCAGTAGA      |
| ZEB1     |                           |
| Forward  | GTTACCAGGGAGGAGCAGTGAAA   |
| Reverse  | GACAGCAGTGTCTTGTGTGTAGAAA |

**Table S2. Primers for MeRIP-PCR**

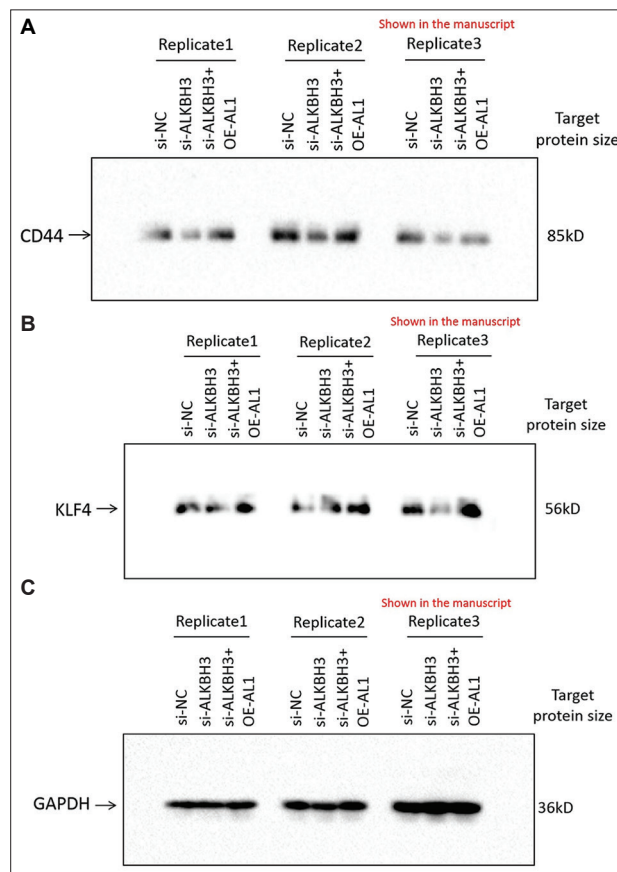
|             | Sequence (5' to 3')          |
|-------------|------------------------------|
| ESCCAL-1 R1 |                              |
| Forward     | ATCACCGTCTTCTGTGTGCG         |
| Reverse     | ACCATGAATGTGGCTGACCA         |
| ESCCAL-1 R2 |                              |
| Forward     | GCCACATTCATGGTGTGAGA         |
| Reverse     | AGAAGAGGGGCAAATTTGTGT        |
| ESCCAL-1 R3 |                              |
| Forward     | GGGACTCATATTACCAGTCTTCACA    |
| Reverse     | ACTTGGGGTTGGCATCTGTT         |
| ESCCAL-1 R4 |                              |
| Forward     | TCAACAGATGCCAACCCCAA         |
| Reverse     | TCATACATTTTTCTCTGCATTACCA    |
| ESCCAL-1 R5 |                              |
| Forward     | TGGCAATTTGAAGAAGAGAGAAGA     |
| Reverse     | TCGCTTGGCACAGTTCTCTT         |
| ESCCAL-1 R6 |                              |
| Forward     | AATCAAAGAGAACTGTGCCAAGC      |
| Reverse     | TTTCAGCACTTTAAAGATCTCATTTCCA |



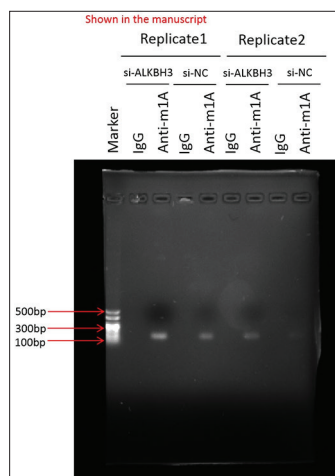
**Figure S1.** Original Western blot images of Figure 3D from KYSE70 cells. After antibody incubation, the ECL kit and the luminescence imaging analysis system (BioRad, USA) were used to detect the target protein attached to the membrane. (A) Three replicates of CD44 blots. (B) Three replicates of KLF4 blots. (C) Three replicates of GAPDH blots.



**Figure S2.** Original Western blot images of Figure 3D from TE1 cells. After antibody incubation, the ECL kit and the luminescence imaging analysis system (BioRad, USA) were used to detect the target protein attached to the membrane. (A) Three replicates of CD44 blots. (B) Three replicates of KLF4 blots. (C) Three replicates of GAPDH blots.



**Figure S3.** Original Western blot images of Figure 5A from TE1 cells. After antibody incubation, the ECL kit and the luminescence imaging analysis system (BioRad, USA) were used to detect the target protein attached to the membrane. (A) Three replicates of CD44 blots. (B) Three replicates of KLF4 blots. (C) Three replicates of GAPDH blots.



**Figure S4.** Original gel images of Figure 4H. MeRIP-PCR was used to detect m<sup>1</sup>A modification of ESCCAL-1 transcript after ALKBH3 silencing. ESCCAL-1: Esophageal squamous cell carcinoma associated long non-coding RNA 1; m<sup>1</sup>A: N<sup>1</sup>-methyladenosine.