**Table S1.** The sequences of primers used for PCR amplification, qRT-PCR and EMSA

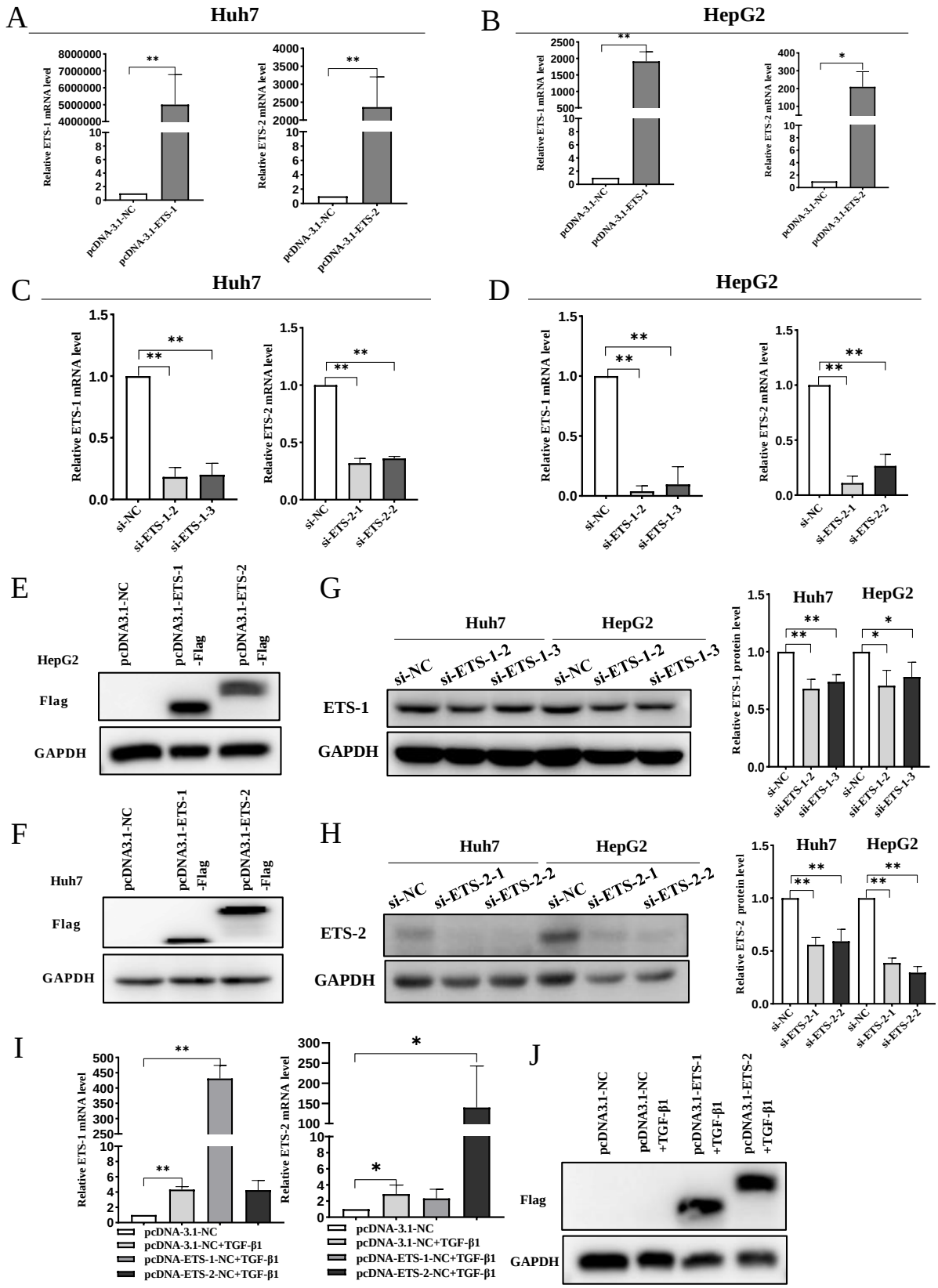
| primer | sequence |
|---|---|
| -1800nt~+55nt | F: cctgagctcgctagcctcgagTATGGGATGCCAAGTGGCG |
| -1540nt~+55nt | F: cctgagctcgctagcctcgagGACAGTAGACCAGCCTCTGGGC |
| -1270nt~+55nt | F: cctgagctcgctagcctcgagACCGTGTTAGCCAAGATGGTCT |
| -942nt~+55nt | F: cctgagctcgctagcctcgagTAGCTCAGCTTTCCTAGAAGGATAATG |
| -735nt~+55nt | F: cctgagctcgctagcctcgagCCAAGTGCCAAGGGAAGGG |
| -453nt~+55nt | F: cctgagctcgctagcctcgagGAGAGGGAGGGAGGAATAAGGG |
| -231nt~+55nt | F: cctgagctcgctagcctcgagTCTTTCTCACCCTCTTTCCTGTTT |
| -21nt~+55nt | F: cctgagctcgctagcctcgagCCACGCCTGGGAGGGCCC |
| -1800nt~+55nt | R: cagtaccggattgccaagcttTGCTGTGAGCATCTGAACACCC |
| pcDNA3.1-ETS-1-Flag: | F: gggagacccaagctggctagc ATGAAGGCGGCCGTCGATCTCAA |
| | R: tccgagctcggtaccaagcttTCACTTGTCGTCATCGTCTTTGTAGT CCTCGTCGGCATCTGGCTTG |
| pcDNA3.1-ETS-2-Flag: | F: gggagacccaagctggctagcATGAATGATTTCGGAATCAAGAATA TGGACC |
| | R: tccgagctcggtaccaagcttTCACTTGTCGTCATCGTCTTTGTAGT CGTCCTCCGTGTCGGGC |
| Siglec-15- qRT-PCR | F: TTTGAGCCAGATGAACCC CC |
| | R: CAGGGAGCTCCGAAATG GTT |
| GAPDH- qRT-PCR | F: GGTGTGAACCATGAGAAGTATGA |
| | R: GAGTCCTTCCACGATACCAAAG |
| ETS-1- qRT-PCR | F: ACGTGTACCGCTTTGTGTGT |
| | R: TCGTCGGCATCTGGCTTG |
| ETS-2- qRT-PCR | F: CTCTGGGCCACCAATGAGTT |
| | R: TCACCCACAAAGTCAGGTGC |
| Cold EBS1 probe | F: GGAGGGAGAAAGGGAGGAAGAGAGG |
| | R: CCTCTCTTCC TCCCTTTCTC CCTCC |
| Biotin EBS1 probe | F: GGAGGGAGAAAGGGAGGAAGAGAGG |
| | R: CCTCTCTTCC TCCCTTTCTC CCTCC |
| Mutated EBS1 probe | F: GGAGGGAGAAAGAAAAAAAGAGAGG |
| | R: CCTCTCTTTT TTTCTTTCTC CCTCC |
| Cold EBS2 probe | F: AGGAAGAGAGGAAGGAAGGAA |
| | R: TTCCTTCCTT CCTCTCTTCCT |
| Biotin EBS2 probe | F: AGGAAGAGAGGAAGGAAGGAA |
| | R: TTCCTTCCTT CCTCTCTTCC T |
| Mutated EBS2 probe | F: AGGAAGAAAAAAAAAAGGAA |

| | |
|---|---|
| | R: TTCCTTTTTT TTTTTCTTCC T |
| Cold EBS3 probe | F: AAGGAAAGGAAGGAGGGAGGGAGA |
| | R: TCTCCCTCCC TCCTTCCTTT CCTT |
| Biotin EBS3 probe | F: AAGGAAAGGAAGGAGGGAGGGAGA |
| | R: TCTCCCTCCC TCCTTCCTTT CCTT |
| Mutated EBS3 probe | F: AAAAAAAAAAAGAGGGAGGGAGA |
| | R: TCTCCCTCCC TCTTTTTTTT TTTT |
| Cold EBS4 probe | F: GAGGGAGGGAGAGGAAGGAAGTGAGGGAGGGA |
| | R: TCCCTCCCTC ACTTCCTTCC TCTCCCTCCC TC |
| Biotin EBS4 probe | F: GAGGGAGGGAGAGGAAGGAAGTGAGGGAGGGA |
| | R: TCCCTCCCTC ACTTCCTTCC TCTCCCTCCC TC |
| Mutated EBS4 probe | F: GAGGGAGGGAGAAAAAAAAAGTGAGGGAGGGA |
| | R: TCCCTCCCTCACTTTTTTTTTCTCCCTCCCTC |
| Cold EBS5 probe | F: GAGGGAGGGAGGAAGGAAGGGTGAGCCACAT |
| | R: ATGTGGCTCA CCCTTCCTTC CTCCCTCCCT C |
| Biotin EBS5 probe | F: GAGGGAGGGAGGAAGGAAGGGTGAGCCACAT |
| | R: ATGTGGCTCA CCCTTCCTTC CTCCCTCCCT C |
| Mutated EBS5 probe | F: GAGGGAGGGAGGAAAAAAAGGTGAGCCACAT |
| | R: ATGTGGCTCA CCTTTTTTTC CTCCCTCCCT C |
| Cold EBS6 probe | F: GATGGCAGCCACAGGAAATGGCCCTGTT |
| | R: AACAGGGCCA TTTCCTGTGG CTGCCATC |
| Biotin EBS6 probe | F: GATGGCAGCCACAGGAAATGGCCCTGTT |
| | R: AACAGGGCCA TTTCCTGTGG CTGCCATC |
| Mutated EBS6 probe | F: GATGGCAGCCAGAAAAAATGGCCCTGTT |
| | R: AACAGGGCCA TTTTTTCTGG CTGCCATC |
| TGF-β1-Cold EBS-1-2 probe | F: CTTTCTCACCCTCTTTCCTGTTTCCTGTCCTGGA |
| | R: TCCAGGACAGGAAACAGGAA AGAGGGTGAG AAAG |
| TGF-β1-BiotinEBS-1-2probe | F: CTTTCTCACCCTCTTTCCTGTTTCCTGTCCTGGA |
| | R: TCCAGGACAGGAAACAGGAA AGAGGGTGAG AAAG |
| TGF-β1-MutatedEBS-1-2probe | F: CTTTCTCACCCTCTAAGGTATTTAAGGTCCTGGA |
| | R: TCCAGGACCT TAAATACCTT AGAGGGTGAG AAAG |
| TGF-β1-Cold EBS3 probe | F: GGCTGCCAGGCTTCCTGTCCCCAGTTC |
| | R: GAACTGGGGACAGGAAGCCTGGCAGCC |
| TGF-β1-Biotin EBS3 probe | F: GGCTGCCAGGCTTCCTGTCCCCAGTTC |
| | R: GAACTGGGGATACCAACCCTGGCAGCC |
| TGF-β1-Mutated EBS3 probe | F: GGCTGCCAGGGTTGGTATCCCCAGTTC |
| | R: GAACTGGGGACAGGAAGCCTGGCAGCC |
| TGF-β1-Cold EBS4 probe | F: CCTGTCCCCAGTTCCTCCGGCTCCCGCAGA |
| | R: TCTGCGGGAGCCGGAGGAACTGGGGACAGG |

| | |
|---|---|
| TGF-β1-Biotin EBS4 probe | F: CCTGTCCCCAGTTCCTCCGGCTCCCGCAGA |
| | R: TCTGCGGGAGCCGGAGGAACTGGGGACAGG |
| TGF-β1-Mutated EBS4 probe | F: CCTGTCCCCAGTTTATCCGGCTCCCGCAGA |
| | R: TCTGCGGGAGCCGGATAAACTGGGGACAGG |
| TGF-β1-Cold EBS5 probe | F: CCGCCCGCCTTCCTTCCCCCACCACGC |
| | R: GCGTGGTGGGGGAAGGAAGGCGGGCGG |
| TGF-β1-Biotin EBS5 probe | F: CCGCCCGCCTTCCTTCCCCCACCACGC |
| | R: GCGTGGTGGGGGAAGGAAGGCGGGCGG |
| TGF-β1-Mutated EBS5 probe | F: CCGCCCGCGAAGGTTCCCCCACCACGC |
| | R: GCGTGGTGGGGGAACCTTCGCGGGCGG |

**Table S2**. The sequences of siRNAs used for qRT-PCR, Western blot and Dual-luciferase reporter assay

| siRNA | sequence |
|---|---|
| ETS-1-2 | F: GCACCUUCAAGG-ACUAUGUTT |
| | R: ACAUAGUCCUUGAAGGUGCTT |
| ETS-1-3 | F: GCAGUUUCUUCUGGAAUUATT |
| | R: UAAUUCCAGAAGAAACUGCTT |
| ETS-2-1 | F: AGAAAUGGAAUCCAAGCCUGUUGG |
| | R: CCAACAGGCUUGGAUUCCAUUUCU |
| ETS-2-2 | F: GCCAACAGGCUUGGAUUCCAUUUCU |
| | R: AGAAAUGGAAUCCAAGCCUGUUGGC |




**Supplementary Figure S1**

**Figure S1.** (A-H) The specificity and efficiency of ETS-1 and ETS-2 overexpression or knockdown at mRNA (A-D) and protein (E-H) levels was confirmed in HepG2 and Huh7 cells by qRT-PCR and Western blot analysis, respectively. (I-J) The specificity and efficiency of ETS-1 and ETS-2 overexpression at mRNA (I) and protein (J) levels was confirmed in HepG2 cells by qRT-PCR and Western blot analysis, respectively. * $p < 0.05$ and ** $p < 0.01$.