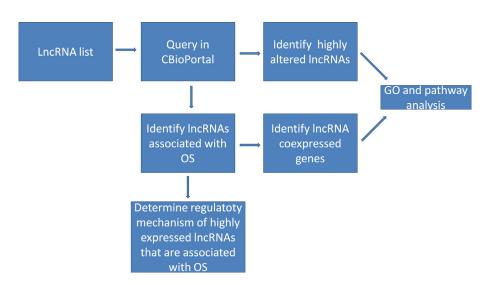
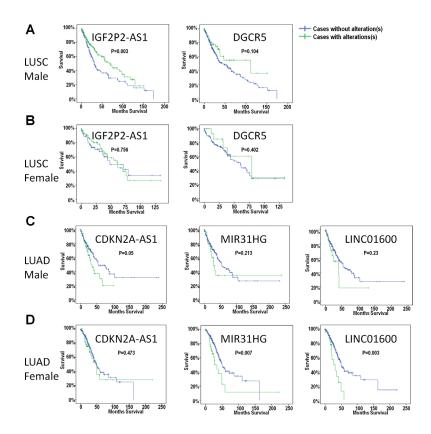
## LncRNAs are altered in lung squamous cell carcinoma and lung adenocarcinoma

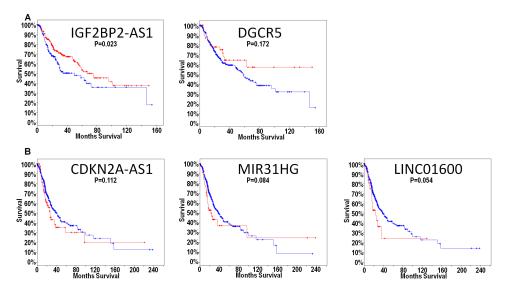
**Supplementary Materials** 



**Supplementary Figure S1: Flowchart indicating how lncRNAs were analyzed in this paper.** The lncRNA list was downloaded from HUGO, and was queried in cBioPortal software. Highly altered lncRNAs and lncRNAs associated with overall survival (OS) were identified. Coexpressed gene lists were generated through cBioPortal. GO and pathway analysis were performed for highly altered lncRNAs and coexpressed genes. For lncRNAs associated with OS, potential promoters and enhancers were predicted, and their activities analyzed.



**Supplementary Figure S2: Overall survival analysis of the five selected lncRNAs grouped by gender.** For the five selected lncRNAs, the overall survival data and clinical information were downloaded from cBioPortal website. Overall survival of these lncRNAs were analyzed between different genders. (A) Overall survival analysis of IGF2BP2-AS1 and DGCR5 in LUSC in male patients; (B) Overall survival analysis of CDKN2A-AS1, MIR31HG and LINC01600 in LUAD in male patients; (D) Overall survival analysis of CDKN2A-AS1, MIR31HG and LINC01600 in LUAD in female patients;



**Supplementary Figure S3: Disease free analysis of the five selected lncRNAs.** (A) Disease free analysis of IGF2BP2-AS1 and DGCR5 in LUSC; (B) Disease free analysis of CDKN2A-AS1, MIR31HG and LINC01600 in LUAD.

| Supplementary | Table S1: | LncRNA | downloaded | from HUGO. | . See Supplementar | ry Table S1 |
|---------------|-----------|--------|------------|------------|--------------------|-------------|
|---------------|-----------|--------|------------|------------|--------------------|-------------|

**Supplementary Table S2:** LncRNAs valid in cBioPortal. See Supplementary\_Table\_S2

Supplementary Table S3: LncRNAs with alteration frequency higher than 1% in LUSC. See Supplementary\_Table\_S3

Supplementary Table S4: LncRNAs with alteration frequency higher than 1% in LUAD. See Supplementary\_Table\_S4

## **Supplementary Table S5: Primer sequences for plasmid construction**

| Primer               | Sequence                           |
|----------------------|------------------------------------|
| IGF2BP2AS1Promoter-F | AAATGCTAGCGAAATGTAAAATTTGCAATAATC  |
| IGF2BP2AS1Promoter-R | AATACTCGAGGTTATGGGCCAGAGTTCTGT     |
| IGF2BP2AS1Enhancer-F | AAATGGTACCGTTAGATACCAGAAAGACAGCAT  |
| IGF2BP2AS1Enhancer-R | AATAACGCGTGAACCTGGAAGGTGGAGG       |
| DGCR5Promoter-F      | AATAAGATCTTCTGCTTCATATCAGTGGACCT   |
| DGCR5Promoter-R      | AAATAAGCTTCCCAGGTCCACTGATATGAA     |
| DGCR5Enhancer-F      | AATAACGCGTGGTGAGTGTCCACGCGGC       |
| DGCR5Enhancer-R      | AAATCTCGAGGTGCAGCCTGCGACACCA       |
| LINC016000Promoter-F | GGCGGCTAGCGTACACGTTTTCATATTTAATTA  |
| LINC016000Promoter-R | AATACTCGAGTGCAGCGCGGCGTGGGCC       |
| LINC01600Enhancer1-F | AAATGGTACCCGTGTCTTTCTTATCAAGCC     |
| LINC01600Enhancer1-R | AATAACGCGTAAGCTCTGTTATTATTATCTTTTG |
| LINC01600Enhancer2-F | AAATGGTACCATGACCTGTTTTTCCTGACTC    |
| LINC01600Enhancer2-R | AATAACGCGTTTCTCTTTCCCTACTCCCC      |