| Species | Oligo name | Sense (5′→3′) | Anti-sense (5′→3′) |
|---------|------------|----------------|-------------------|
| human   | c-Myc      | CAGCAGCCTCCCGCGACGAT | GGGTGAGCAGCGTCGAAT |
|         | BIRC5      | TTCTCAAGGACCAAGCGCATC | GTTCCGCTTGATGAGGTTCG |
|         | CYR61      | TGGCCAGAGCCTGCTCTGT | GCGAGGCTCCATTTCAA |
|         | Cyclin D1  | GCGAGGAACAGAAGTGCG | TGGAGTTTGCGGTAGATGC |
|         | GAPDH      | CTCCCTGCACCAACAACTGC | GGGCCATCCACAGTCCTTG |
| mouse   | β-catenin  | AGGGTGCTATTCCACGACTA | GTTGTGAAACGTCCCGAGCAA |
|         | BIRC5      | TCCATCCACCTGACTACACG | GTGCTTTTCTATGCTAAT |
|         | c-Jun      | GGCACATCCACACTACACCG | GTTCTGGCTATGCACTG |
|         | CYR61      | CTGCTGCAGCGGCTTGGTGGT | AGGCGGCGGGGACAGGT |
|         | GAPDH      | AGGTCGGGTGGAACGATTTG | TGTAAGCATTGTAGTTGAG |

**Table S2: Primers used for ChIP**

| Species | Oligo name | Sense (5′→3′) | Anti-sense (5′→3′) |
|---------|------------|----------------|-------------------|
| human   | LKB1-pro   | GGGAGGAGGCTAAACAGATGG | CCGAGTGGCCCTCAGCGTC |