Next-generation sequencing coupled with a cell-free display technology for high-throughput production of reliable interactome data

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### Supplementary Table S1. Numbers of reads analyzed

| Dataset               | Bait (Irf7) | Initial library |
|-----------------------|-------------|-----------------|
|                       | +           | -               |                |
| Sequenced reads       | 206,322     | 304,504         | 277,833        |
| Post processing       | 177,935     | 278,816         | 238,683        |
| Post mapping          | 47,849      | 63,306          | 102,092        |

\(^a\)After eliminating erroneous reads from the sequenced reads.

\(^b\)Datasets that were used in the subsequent *in silico* analysis after being properly mapped to the genomic sequences.
Supplementary Table S2. Synthetic primers used for amplifying target sequences for real-time PCR assays of 21 selected interacting regions

| Gene Symbols | Refseq IDs | Positions in Refseq | Forward primers | Reverse primers |
|--------------|------------|---------------------|-----------------|-----------------|
| Bclaf1       | NM_001025392.1 | 989..1155          | ATTCAGCACAGTCCTGAGAG | CAGGGCTTCTTCGTGATG |
| Ctage5       | NM_146034.2   | 702..813            | TCAGGAAAGCCAGAAACAG | GACTCTTTCAATGCCAGCTT |
| Dctn6        | NM_011722.2   | 10..79              | AGAAGACGGAAAAAGAGTGT | TTCTCTGATTTGCGTTC |
| Gtpbp4       | NM_027000.4   | 952..1058           | GTCATCGAGACCAGTACCCT | GTGGAGGCAAAAGGCGT |
| If27         | NM_029803.1   | 97..196             | CCTCCATAGCGCAAGAAG | CTGCAACTCCACCTCATT |
| Krc1         | NM_145568.3   | 933..1088           | GAGAGGAAAAAGAGTTGTG | GCTTTCTGATTCCACATCCTG |
| Ogfr         | NM_031373.2   | 21..76              | TGGAGCACCGGAAATGCGAT | TGGCGCGCTTCTCCGTCCTC |
| Aurkaip1     | NM_025338.3   | 455..549            | GGCACTGGGAAAAACAGTG | GTGGGOTGTTCATCTCCTG |
| Taf15        | NM_027427.2   | 505..601            | CCAAACGTCTTACCACATC | CCAACCTACTCATCAGCAG |
| 2310003F16Rik | NM_026318.2  | 31..128             | GGAGACGGTGGATTTGG | GCAGCCACTGCTATGTT |
| Anp32a       | NM_009672.3   | 773..884            | GTTACATATAGCCGGAAGT | CTATCGTCGGGTCGTG |
| Myhr         | NM_022410.2   | 249..348            | GTGCCCTCCAGCAAGAAT | CTACATTGCTCCTCTCC |
| S100a9       | NM_009114.2   | 53..114             | CGATCGGAGCGCAAGATAC | CCTAGAGATTGAGGAAGGGTCG |
| Samd9t       | XM_620286.3   | 4333..4407          | ATCCAAATCCAAAGAAGC | CTTGTAATAGGAAGGTATAGT |
| Mpeg1        | NM_010821.1   | 231..318            | AACAGCTCTAGGCGCTT | GCTTCCAGCACACGTATT |
| Pfdn5        | NM_027044.3   | 128..234            | TTGTGCTCAGTCTTCTTTG | CGTCTGAGACGCTTGGCT |
| Jund         | NM_010592.4   | 2157..2293          | AATGCAAGCAGCCTAAAAGCC | TGAGACTTCTTGTGATG |
| Irf2         | NM_008391.3   | 859..909            | CAGAAAGCGAAACTACGAGC | CTCCTGCTCCTCTCATA |
| Ttn          | NM_011652.3   | 38764..38908        | GTGGGCAAAAGTATCCCG | AGGAGAAGACACGCCATCA |
| Uvrag        | NM_178635.2   | 802..858            | GAGACTTGGGAAAGGAATGT | CTATATCTGCTGCTCATG |
| Irf2bp2      | XM_001002526.2| 2254..2317          | CGGAGATGTTGAAAGTGAAGA | CATGGGCTTCTTCGACG |
Supplementary Figure S1. Comparisons between the IVV-HiTSeq and real-time PCR for the 21 selected interacting regions.

The 454 sequencing results are for the mapped genes with the bait Irf7 [bait(+)] and in the absence of bait [bait(−)]. The Real-time PCR shows the corresponding results for the quantification.
