

Additional Files

Additional file 1 — The results by applying mod_CoMDP to the ovarian carcinoma dataset

Table S1 - The gene sets co-occurrent with TP53 identified by applying mod_CoMDP to the ovarian carcinoma dataset

r	Gene set	<i>p</i>	<i>n</i>	<i>ra</i>	<i>pr</i>
3	<i>MYC, CCNE1, NINJ2</i>	< 0.0001	155	0.4397	0.0430
4	<i>MYC, CCNE1, NINJ2, MG₅</i>	0.0060	169	0.4894	0.0280
5	<i>MYC, CCNE1, NINJ2, ZNF596, USH2A</i>	0.0020	183	0.5228	0.0190
6	<i>MYC, CCNE1, NINJ2, ZNF596, USH2A, BRD4</i>	0.0240	197	0.5610	0.0340
7	<i>MYC, CCNE1, NINJ2, ZNF596, USH2A, BRD4, HMCN1</i>	0.0220	206	0.5868	0.0060
8	<i>MYC, CCNE1, NINJ2, ZNF596, USH2A, NF1, HMCN1, TPD52L2</i>	0.0020	211	0.6098	0.0040
9	<i>MYC, CCNE1, NINJ2, ZNF596, USH2A, NF1, HMCN1, TPD52L2, TRIT1</i>	< 0.0001	221	0.6276	0.0010
10	<i>MYC, CCNE1, NINJ2, MG₅, USH2A, NF1, HMCN1, ZNF596, USP35, MG₆</i>	0.0310	226	0.6563	0.0010

Here *p* and *pr* denote the *p*-values of the significance of the detected gene set and its co-occurrence significance with *TP53* respectively, *n* denotes the gene set's overage, and *ra* denotes its co-occurrence ratio with *TP53*. *MG₅* is a metagene including four genes: *STMN3, SLC2A4RG, ZGPAT, RTEL1*.