

Supplementary Information for

Integrative Bioinformatics Analysis of The Cell Division Cycle and Ribosomal Pathways in The Rat Varicocele: Implications for Drug Discovery

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Table S1: The top up and down-regulated genes

ID	logFC	P value	Up/down-regulated
ENSRNOT00000070986	7.592647	4.73E-07	UP-regulated
ENSRNOT00000080933	5.944522	9.55E-07	UP-regulated
ENSRNOT00000023376	3.784486	2.18E-05	UP-regulated
ENSRNOT00000085470	5.240651	0.000178	UP-regulated
ENSRNOT00000078264	3.939926	0.000288	UP-regulated
ENSRNOT00000012253	4.874332	0.000383	UP-regulated
ENSRNOT00000023240	5.437791	0.000418	UP-regulated
ENSRNOT00000079218	1.456741	0.000474	UP-regulated
ENSRNOT00000009155	5.49675	0.000684	UP-regulated
ENSRNOT00000089958	2.291116	0.000962	UP-regulated
ENSRNOT00000023979	-6.63718	7.06E-05	Down-regulated
ENSRNOT00000056173	-6.29037	0.000173	Down-regulated
ENSRNOT00000077681	-9.21912	0.000178	Down-regulated
ENSRNOT00000089071	-8.38303	0.000197	Down-regulated
ENSRNOT00000026856	-4.2188	0.000503	Down-regulated
ENSRNOT00000058234	-8.35678	0.000535	Down-regulated
ENSRNOT00000013228	-6.32971	0.000615	Down-regulated
ENSRNOT00000036654	-8.40688	0.000886	Down-regulated
ENSRNOT00000086175	-8.52405	0.000897	Down-regulated
ENSRNOT00000091773	-4.02352	0.000976	Down-regulated

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Table S2: The ranking of MCODE scores

Cluster	Score	Up/down-regulated genes
1	15.27	up
2	10.11	up
3	5.12	up
4	2.8	up
1	22.9	down
2	15.1	down
3	3.8	down

Table S3: Top 5 genes in network STRING network-ranked by MCC method

Rank	Name	Score	Up/down-regulated genes
1	<i>BUB1</i>	5665	up
2	<i>SMC4</i>	5629	up
3	<i>ASPM</i>	5546	up
4	<i>KIF11</i>	5536	up
5	<i>CENPE</i>	5282	up
1	<i>RPS2</i>	1.45E+09	down
2	<i>RPS5</i>	1.45E+09	down
3	<i>RPS15</i>	1.45E+09	down
4	<i>RPS19</i>	1.45E+09	down
5	<i>RPL11</i>	1.45E+09	down