

**Supplemental table 1: List of over-expressed genes in ZGP versus ZBNP groups (ZGP/ZBNP ratio  $\geq 2$ ) following microarray analysis at FDR=5%**

	Gene	GenBank name	Fold
1	<b>MOBK1B</b>	Homo sapiens MOB1, Mps One Binder kinase activator-like 1B (yeast)	<b>6.443</b>
2	<b>ZNF793</b>	Homo sapiens zinc finger protein 793 (ZNF793), mRNA	<b>5.44</b>
3	<b>RPL9</b>	Homo sapiens ribosomal protein L9, mRNA (cDNA clone MGC:87207	<b>5.267</b>
4	<b>GGNBP2</b>	Bos taurus similar to zinc finger protein 403,transcript variant 2	<b>5.207</b>
5	<b>PSMD6</b>	Bos taurus proteasome (prosome, macropain) 26S subunit, non-ATPase,	<b>5.162</b>
6	<b>RBMS2</b>	Homo sapiens RNA binding motif, single stranded interacting protein 2 (RBMS2), mRNA	<b>4.542</b>
7	<b>RAN</b>	Bos taurus RAN, member RAS oncogene family, mRNA (cDNA clone	<b>4.535</b>
8	<b>KIF13B</b>	<u>kinesin family member 13B</u>	<b>4.38</b>
9	<b>CCAR1</b>	Bos taurus cell division cycle and apoptosis regulator 1 (CCAR1),	<b>4.278</b>
10	<b>CALM1</b>	Homo sapiens calmodulin 1 (phosphorylase kinase, delta) (CALM1	<b>4.136</b>
11	<b>PPM1G</b>	Homo sapiens protein phosphatase 1G (formerly 2C), magnesium-dependent, gamma isoform	<b>4.113</b>
12	<b>THOC2</b>	Homo sapiens THO complex 2, mRNA (cDNA clone IMAGE:5556338), partial cds	<b>3.804</b>
13	<b>HBA2</b>	Bos taurus hemoglobin alpha chain, mRNA (cDNA clone MGC:157272	<b>3.688</b>
14	<b>EIF4GI</b>	PREDICTED: Bos taurus eukaryotic translation initiation factor eIF4GI protein (EIF4GI), mRNA	<b>3.453</b>
15	<b>FAM73A</b>	Homo sapiens family with sequence similarity 73, member A (FAM73A),	<b>3.429</b>
16	<b>TIE1</b>	Homo sapiens tyrosine kinase with immunoglobulin-like and EGF-like domains 1	<b>3.393</b>
17	<b>SYT11</b>	Bos taurus synaptotagmin XI (SYT11), mRNA	<b>3.271</b>
18	<b>SGCB</b>	Bos taurus sarcoglycan, beta (43kDa dystrophin-associated glycoprotein) (SGCB), mRNA.	<b>3.141</b>
19	<b>DDX51</b>	Homo sapiens DEAD (Asp-Glu-Ala-Asp) box polypeptide 51 (DDX51),	<b>3.116</b>
20	<b>PRRT2</b>	Homo sapiens proline-rich transmembrane protein 2 (PRRT2), mRNA	<b>3.109</b>
21	<b>PSIP1</b>	Homo sapiens PC4 and SFRS1 interacting protein 1 (PSIP1),	<b>3.093</b>
22	<b>GABARAP</b>	Homo sapiens GABA(A) receptor-associated protein (GABARAP), mRNA	<b>3.042</b>
23	<b>RDH11</b>	PREDICTED: Bos taurus retinol dehydrogenase 11 (all-trans/9-cis/11-cis) (RDH11), transcript variant X1	<b>2.833</b>
24	<b>MRPS18B</b>	PREDICTED: Bos taurus similar to Mitochondrial 28S ribosomal protein S18-2 (MRPS18B),	<b>2.832</b>
25	<b>SCARA5</b>	Homo sapiens scavenger receptor class A, member 5 (putative) (SCARA5), mRNA	<b>2.817</b>
26	<b>RLIM</b>	Homo sapiens ring finger protein, LIM domain interacting	<b>2.784</b>
27	<b>CASP9</b>	Homo sapiens caspase 9 splice variant (CASP9) mRNA, complete	<b>2.776</b>
28	<b>CDKN1A</b>	Homo sapiens cyclin-dependent kinase inhibitor 1A (p21, Cip1)	<b>2.744</b>
29	<b>VPS16</b>	Homo sapiens vacuolar protein sorting 16 homolog (S. cerevisiae),	<b>2.732</b>
30	<b>HSD11B2</b>	Bos taurus 11-beta-hydroxysteroid dehydrogenase type 2 mRNA,	<b>2.722</b>
31	<b>CALM2</b>	Bos taurus similar to calmodulin 2 (LOC514457)	<b>2.681</b>
32	<b>HBB</b>	Homo sapiens hemoglobin, beta (HBB), mRNA	<b>2.604</b>
33	<b>GLB1</b>	Bos taurus GLB1 mRNA for galactosidase, beta 1, complete cds	<b>2.546</b>
34	<b>RPS4X</b>	Homo sapiens ribosomal protein S4, X-linked (RPS4X), mRNA	<b>2.519</b>
35	<b>PANX1</b>	Homo sapiens mRNA for pannexin 1 (PANX1 gene),	<b>2.379</b>

36	<b>PRDX2</b>	Bos taurus peroxiredoxin 2 (PRDX2), mRNA	<b>2.378</b>
37	<b>RNF121</b>	Homo sapiens ring finger protein 121 (RNF121), transcript variant	<b>2.36</b>
38	<b>HSP90B1</b>	Bos taurus tumor rejection antigen (gp96) 1 / heat shock protein 90kDa beta (Grp94), member 1	<b>2.322</b>
39	<b>POMP</b>	Bos taurus proteasome maturation protein (POMP), mRNA	<b>2.294</b>
40	<b>CALU</b>	Homo sapiens calumein (Calu) mRNA, complete cds	<b>2.249</b>
41	<b>VPS33A</b>	Homo sapiens vacuolar protein sorting 33 homolog A (S. cerevisiae)	<b>2.231</b>
42	<b>ZFYVE20</b>	Homo sapiens zinc finger, FYVE domain containing 20, mRNA (cDNA	<b>2.159</b>
43	<b>RGS3</b>	Bos taurus regulator of G-protein signaling 3 (RGS3), mRNA	<b>2.15</b>
44	<b>RPL37A</b>	Bos taurus ribosomal protein L37a (RPL37A), mRNA	<b>2.123</b>
45	<b>HDAC2</b>	Bos taurus histone deacetylase 2 (HDAC2), mRNA	<b>2.102</b>
46	<b>NRP1</b>	Homo sapiens neuropilin 1 (NRP1)	<b>2.102</b>
47	<b>EMP2</b>	Bos taurus epithelial membrane protein 2 (EMP2), mRNA	<b>2.091</b>
48	<b>MALAT1</b>	Homo sapiens MALAT1 mRNA, complete sequence	<b>2.046</b>