

## SUPPLEMENTARY TABLE

**Supplementary Table 1. Biologic pathways enriched by differentially expressed serum miRNAs.**

KEGG pathway	p-value	#genes	#miRNAs
Top of Form		Top of Form	
Fatty acid biosynthesis (hsa00061) Bottom of Form	2.238E-12	7Bottom of Form	6
Top of Form		Top of Form	
Hippo signaling pathway (hsa04390) Bottom of Form	2.604E-06	70Bottom of Form	15
Top of Form		Top of Form	
Axon guidance (hsa04360) Bottom of Form	2.604E-06	69Bottom of Form	16
Top of Form		Top of Form	
Proteoglycans in cancer (hsa05205)Bottom of Form	3.331E-05	93Bottom of Form	18
Top of Form		Top of Form	
Glioma (hsa05214) Bottom of Form	5.042E-05	35Bottom of Form	15
Top of Form		Top of Form	
Adrenergic signaling in cardiomyocytes(hsa04261) Bottom of Form	9.324E-05	69Bottom of Form	17
Top of Form		Top of Form	
Neurotrophin signaling pathway (hsa04722) Bottom of Form	9.324E-05	65Bottom of Form	18
Top of Form		Top of Form	
ErbB signaling pathway (hsa04012)Bottom of Form	1.001E-04	50Bottom of Form	18
Top of Form		Top of Form	
Glutamatergic synapse (hsa04724) Bottom of Form	1.972E-04	53Bottom of Form	15
Top of Form		Top of Form	
Oxytocin signaling pathway (hsa04921)Bottom of Form	2.029E-04	79Bottom of Form	16
Top of Form		Top of Form	
FoxO signaling pathway (hsa04068) Bottom of Form	2.363E-04	67Bottom of Form	16
Top of Form		Top of Form	
Long-term potentiation (hsa04720) Bottom of Form	4.527E-04	39Bottom of Form	15
Top of Form		Top of Form	
cGMP-PKG signaling pathway (hsa04022) Bottom of Form	5.394E-04	79Bottom of Form	18
Top of Form		Top of Form	
mTOR signaling pathway (hsa04150) Bottom of Form	7.141E-04	35Bottom of Form	15
Top of Form		Top of Form	
Wnt signaling pathway (hsa04310) Bottom of Form	7.141E-04	66Bottom of Form	16
Top of Form	7.141E-04	Top of Form	18
Signaling pathways regulating pluripotency of stem cells (hsa04550) Bottom of Form		67Bottom of Form	
Top of Form		Top of Form	
PI3K-Akt signaling pathway (hsa04151) Bottom of Form	7.141E-04	146Bottom of Form	19
Top of Form		Top of Form	
Acute myeloid leukemia (hsa05221) Bottom of Form	1.070E-03	33Bottom of Form	15
Top of Form		Top of Form	
Long-term depression (hsa04730) Bottom of Form	1.318E-03	31Bottom of Form	11
Top of Form		Top of Form	
Ras signaling pathway (hsa04014) Bottom of Form	1.318E-03	100Bottom of Form	18
Top of Form		Top of Form	
Amphetamine addiction (hsa05031)Bottom of Form	1.354E-03	33Bottom of Form	16
Top of Form		Top of Form	
Prostate cancer (hsa05215) Bottom of Form	1.373E-03	46Bottom of Form	15

Top of Form		Top of Form	
Pathways in cancer (hsa05200) Bottom of Form	1.373E-03	167Bottom of Form	18
Top of Form		Top of Form	
Gap junction (hsa04540) Bottom of Form	1.412E-03	39Bottom of Form	15
Top of Form		Top of Form	
Thyroid hormone signaling pathway (hsa04919) Bottom of Form	1.412E-03	53Bottom of Form	19
Top of Form		Top of Form	
Glycosaminoglycan biosynthesis (hsa00534) Bottom of Form	1.864E-03	11Bottom of Form	10
Top of Form		Top of Form	
Non-small cell lung cancer (hsa05223) Bottom of Form	1.864E-03	28Bottom of Form	15
Top of Form		Top of Form	
Rap1 signaling pathway (hsa04015) Bottom of Form	1.864E-03	94Bottom of Form	19
Top of Form		Top of Form	
AMPK signaling pathway (hsa04152) Bottom of Form	2.614E-03	60Bottom of Form	18
Top of Form		Top of Form	
MAPK signaling pathway (hsa04010) Bottom of Form	3.176E-03	113Bottom of Form	19