**Supplemental Figure 1**



**Supplemental Figure 1.** Density plot comparisons of RNA-Seq to microarray transcript data and comparison of both to DNA copy, DNA methylation and protein expression data. For all panels, the x-axis is the correlations levels, and the y-axis (density) visualizes the relative amount of correlations with respect to the total. **A.** Distribution of correlations between RNA-Seq and microarray transcript gene expression levels. The vertical black line is the mean correlation value (0.64). **B.** Overlapping density plots using the correlation between array CGH DNA copy numbers versus both RNA Seq (red) and microarray (blue) transcript levels. Vertical colored lines of the same colors mark the means of both density distributions. **C.** Overlapping density plots using the correlation between DNA methylation levels versus both RNA-seq (red) and microarray (blue) transcript levels. Vertical (almost overlapping) colored lines of the same colors mark the means of both density distributions. **D.** Overlapping density plots of the correlation between protein expression levels versus both RNA-seq (red) and microarray (blue) transcript levels. Vertical colored lines using the same colors mark the means of both density distributions.

**Supplemental Figure 2**



**Supplemental Figure 2.** Scatter plots for 9 selected genes for transcript expression as measured by microarray versus RNA-seq in the NCI-60. "r" is Pearson's correlation. The x-axis is the linear RNA-seq gene composite transcript levels (fragments per kilobase per million reads, FPKM) as described in Supplemental Table 1. The y-axis is the microarray measured transcript levels (z scores) as described in CellMiner \ NCI-60 Analysis Tools \ Cell line signature \ Gene transcript z scores (5). The colors of the dots for all plots are described in the legend in upper left panel (TP53) and correspond to the conventions used in the CellMinerCDB website (<http://discover.nci.nih.gov/cellminercdb>). BR, CNS, CO, LE, ME, LC, OV, PR, and RE are breast, central nervous system, colon, leukemia, melanoma, lung cancer, ovarian, prostate and renal cell lines, respectively.