

Correction: 2'-Hydroxyflavanone effectively targets RLIP76-mediated drug transport and regulates critical signaling networks in breast cancer

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This article has been corrected: A minor typo has been corrected in the *Analyses of global gene expression changes following 2HF treatment* paragraph. The 4th sentence should read, 'The gene expression profiles and curves $\log_2(\text{FPKM}+0.1)$ of cell lines and treatment groups following 2HF treatment are presented in Supplementary Figure 1A and 1B.' In addition, in the Materials and Methods section, the *RNA-seq and gene ontology* paragraph has been updated. The new text is shown below.

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Read counts were tabulated using htseq-count [1], with UCSC known gene annotations (TxDb.Hsapiens.UCSC.hg19.knownGene, [2]). Fold-change values were calculated from Fragments Per Kilobase per Million reads (FPKM, [3]) normalized expression values, which were also used for visualization (following a \log_2 transformation). Aligned reads were counted using GenomicRanges [4]. Prior to *p*-value calculation, genes were filtered to only include transcripts with an FPKM expression level of 0.1 (after a rounded \log_2 - transformation) in at least 50% of samples [5] as well as genes that are greater than 150 bp.

Differentially expressed genes were defined using two strategies. For the 1st strategy, a 2-variable model was used to compare differences between 2HF and Control samples, adjusting for differences between cell lines. For the 2nd strategy, 2HF versus Control comparisons were run for each cell line. In both cases, *p*-values were calculated from raw counts using DESeq2 [6], and false discovery rate (FDR) values were calculated using the method of Benjamini and Hochberg [7]; genes were defined as differentially expressed if they had a $|\text{fold-change}| > 1.5$ and $\text{FDR} < 0.05$. A heatmap to visualize differentially expressed genes from the 2-variable model (with two annotation columns) was created using the heatmap.3() function (<https://github.com/obigriffith/biostar-tutorials/blob/master/Heatmaps/heatmap.3.R>) in R. Heatmaps for differentially expressed genes within GO or IPA gene sets for individual cell lines (with one annotation column) were created using heatmap.2() in the 'gplots' package. Barplots were created using the barplot() function in R. Gene Ontology (GO [8]) enrichment was calculated using goseq [9]. Additional systems-level analysis was performed in IPA (Ingenuity® Systems, <https://www.ingenuity.com>). The genes from the 2-variable DESeq2 differential expression comparison were used to define signature in BD-Func [10], which was then applied to produce scores on a per-sample basis (from $\log_2(\text{FPKM} + 0.1)$ values), as an alternative strategy to view the difference in scores between 2HF and Control samples.