Minor essential revisions:

1. On page 13, the authors mentioned that "Three biological replicates for each cell line were obtained to ensure that the 2DE protocol provided consistent results. A single replicate from each cell line was selected for further analysis." Please describe in detail how the consistency was evaluated.

2. On page 11, "a p-value that is obtained by comparing the number of molecules of interest relative to the total number of occurrences of these molecules in all functional/pathway annotations stored in the Ingenuity Pathways knowledge base (i.e. a Fisher’s exact test with the Benjamini-Hochberg correction for multiple hypothesis testing)." I don't think "the number of molecules of interest" and "the total number of occurrences of these molecules in all pathway annotations" are comparable. An accurate description for the Fisher's exact test is needed (i.e. how the 2x2 table for the Fisher's exact test was set up).

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

I declare that I have no competing interests