Supporting Information

Monocarbonyl Curcumin Analogs: Heterocyclic Pleiotropic Kinase Inhibitors that Mediate Anti-Cancer Properties.

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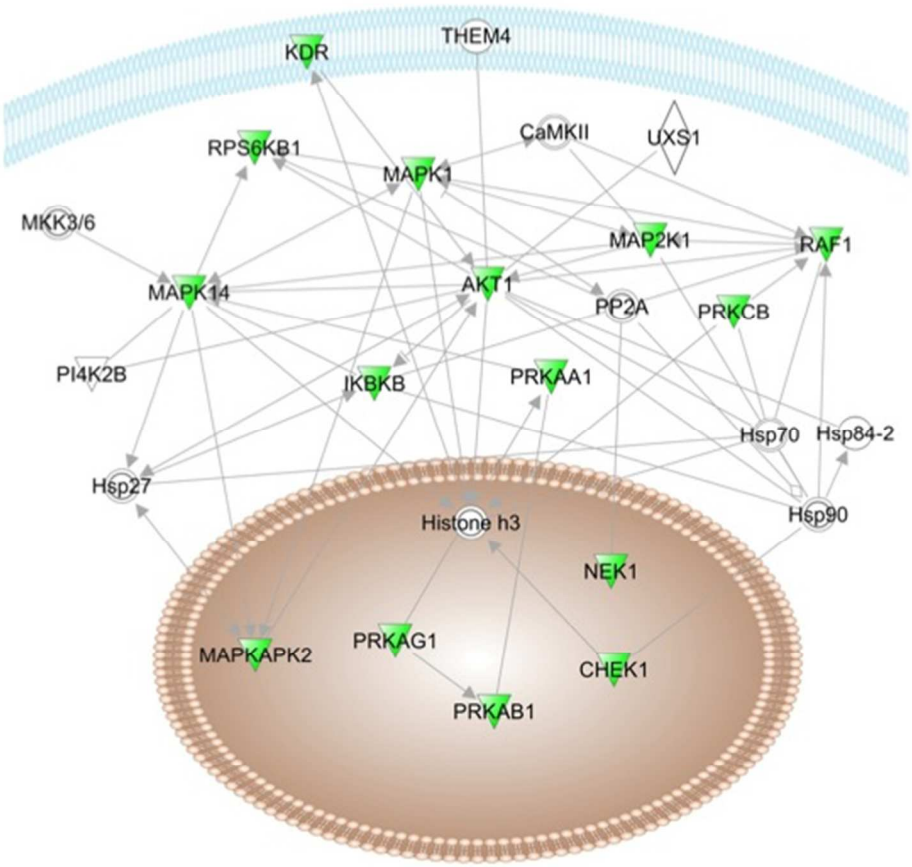

Figure S1. An interaction network for the 12 most inhibited kinases (green) by Ingenuity Pathway Analysis. Interactions are algorithmically generated based literature-derived direct associations available in the Ingenuity database. The molecules are named according to the Entrez gene names and positioned by the cellular compartment denoted by their Gene Ontology (GO) annotations (cellular membrane, cytosol, or nucleus). Kinases are shown as triangles, protein complexes as circles, and other enzymes as diamonds.

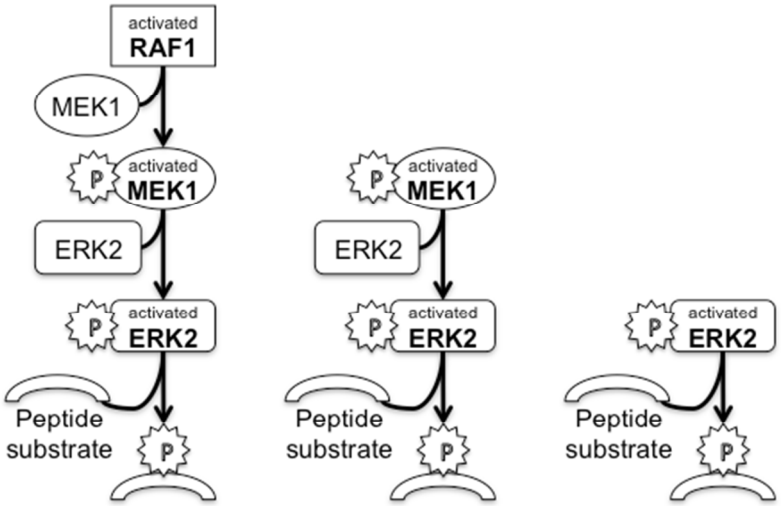

Figure S2. Diagram of kinase cascades used in the Z'Lyte kinase assay. a) The RAF1 assay is a three tiered cascade that starts with RAF1, which subsequently phosphorylates and activates MEK1 and ERK2 leading to peptide substrate phosphorylation employed to measure reaction progress (see Z'Lyte in vitro kianse assay in Materials and Methods.) b) Two tiered MEK1 cascade. c) ERK2 is a direct assay typical of the majority of the kinases tested.

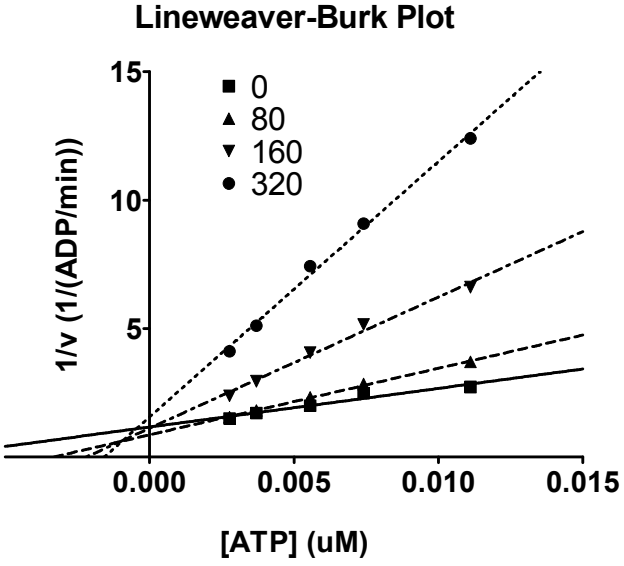

Figure S3. Analysis of enzyme kinetics data for **4** and AKT2. Lineweaver-Burk reciprocal plot.