**Supplementary Table S4 Gene Set Analysis of NTRC 0066-0 response**

Zaman *et al.* TTK inhibitors as a targeted therapy for *CTNNB1* mutant cancers

**Table S4a**. Scores of Wnt- and β-catenin signaling-related gene sets from a collection of curated empirical gene sets.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Gene set** | **Total genes** | **Enrichment**  | **p-value** | **adjusted****p-value** |
| KENNY\_CTNNB1\_TARGETS\_UPa | 49 | 0.42 | **0.01** | **0.03** |
| KENNY\_CTNNB1\_TARGETS\_DNb | 50 | 0.29 | 0.25 | 0.43 |
| FEVR\_CTNNB1\_TARGETS\_DNc | 524 | 0.45 | **0.0002** | **0.001** |
| FEVR\_CTNNB1\_TARGETS\_UPd | 644 | -0.16 | 0.69 | 0.95 |
| MYC\_UP.V1\_UPe | 173 | 0.37 | **0.0002** | **0.001** |
| MYC\_UP.V1\_DNf | 162 | -0.24 | 0.11 | 0.29 |
| LABBE\_WNT3A\_TARGETS\_UPg | 108 | 0.36 | **0.004** | **0.02** |
| LABBE\_WNT3A\_TARGETS\_DNh | 91 | -0.25 | 0.22 | 0.60 |

aGenes upregulated in HC11 cells (mammary epithelium) by expression of constantly active *CTNNB1*.Kenny PA, *et al*. Receptor and secreted targets of Wnt-1/β-catenin signaling in mouse mammary epithelial cells. BMC Cancer 2005: 5; 3. bas g but downregulated genes. cGenes down-regulated in intestinal crypt cells upon deletion of *CTNNB1*. Fevr T, *et al*. Wnt/β-catenin is essential for intestinal homeostasis and maintenance of intestinal stem cells. Mol Cell Biol 2007: 27: 7551-7559. das e but upregulated genes. eGenes up-regulated in primary epithelial breast cancer cell culture over-expressing *MYC*. fas a, but down-regulated genes. gUp-regulated genes in NMuMG cells (mammary epithelium) after stimulation with WNT3A. Labbé E *et al*. Transcriptional cooperation between the transforming growth factor-beta and Wnt pathways in mammary and intestinal tumorigenesis. Cancer Res 2007: 67; 75-84. has c, but downregulated genes. Gene set were downloaded from MSigDB database, where individual genes that make up a particular set can be found (software. broadinstitute. org/gsea/msigdb, Subramanian A *et al*. Gene set enrichment analysis: a knowledge-based approach for interpreting genome-wide expression profiles. Proc Natl Acad Sci USA 2007; 102; 15545-15550). Scores and p-values were generated using the package Piano in R (27, 29). Gene expression values were downloaded from CCLE (28).

**Table S4b**. Scores of Wnt- and β-catenin signaling-related gene sets.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Geneseta** | **Total genes** | **Enrichment**  | **p-value** | **adjusted p** |
| PID\_MYC\_ACTIV\_PATHWAY | 72 | 0.53 | **0.0002** | **0.0017** |
| PID\_FOXM1\_PATHWAY | 38 | 0.50 | **0.001** | **0.01** |
| PID\_MYC\_PATHWAY | 25 | 0.52 | **0.008** | **0.03** |
| PID\_WNT\_NONCANONICAL\_PATHWAY | 32 | 0.38 | 0.09 | 0.22 |
| PID\_INTEGRIN5\_PATHWAY | 17 | -0.43 | 0.13 | 0.70 |
| PID\_ECADHERIN\_NASCENT\_AJ\_PATHWAY | 37 | 0.33 | 0.19 | 0.38 |
| PID\_MYC\_REPRESS\_PATHWAY | 60 | 0.27 | 0.27 | 0.47 |
| PID\_BETA\_CATENIN\_NUC\_PATHWAY | 78 | 0.26 | 0.27 | 0.47 |
| PID\_WNT\_SIGNALING\_PATHWAY | 27 | 0.31 | 0.40 | 0.59 |
| PID\_BETA\_CATENIN\_DEG\_PATHWAY | 17 | 0.35 | 0.40 | 0.60 |
| PID\_WNT\_CANONICAL\_PATHWAY | 19 | 0.31 | 0.50 | 0.69 |
| PID\_INTEGRIN4\_PATHWAY | 11 | 0.19 | 0.99 | 1.00 |

aGenesets from the Pathway Interaction Database (PID) subset as defined at MSigDB. Only genes relevant to Wnt or β-catenin signaling are shown, along with integrin and adherin sets as control. The top-ranking set in this table ranks second in the complete PID collection of gene sets. Individual genes that make up a particular set can be found at the MSigDB database. Scores and p-values were generated using the package Piano in R (27, 29).