

## Using heterogeneity of the patient-derived xenograft model to identify the chemoresistant population in ovarian cancer

### Supplementary Material

**Supplementary Table 1:** RNAseq revealed 299 genes that had significantly ( $p < 0.05$ ) different expression in the treated PDX samples versus the untreated PDX samples.

| Gene         | Chromosome | Start Location | Stop Location | Strand | Fold Change (tr/untr) |
|--------------|------------|----------------|---------------|--------|-----------------------|
| VSTM4        | 10         | 50222290       | 50323578      | -      | 2.88385               |
| ZNF750       | 17         | 80787310       | 80797932      | -      | 2.44072               |
| RP11-193H5.1 | 1          | 238025475      | 238091620     | +      | 2.38723               |
| ACP5         | 19         | 11685475       | 11689802      | -      | 2.29376               |
| HIST1H2BC    | 6          | 26123695       | 26124133      | -      | 2.14114               |
| CPEB3        | 10         | 93808397       | 94050876      | -      | 2.11674               |
| DNM3         | 1          | 171810618      | 172381858     | +      | 2.02791               |
| MPC1         | 6          | 166778408      | 166796502     | -      | 1.97979               |
| PRPH         | 12         | 49688909       | 49692482      | +      | 1.95466               |
| ABCG1        | 21         | 43619799       | 43717355      | +      | 1.93807               |
| MGLL         | 3          | 127407905      | 127542094     | -      | 1.92425               |
| TLR5         | 1          | 223282748      | 223316625     | -      | 1.88421               |
| MMP14        | 14         | 23305742       | 23316809      | +      | 1.87184               |
| GPC4         | X          | 132435064      | 132549206     | -      | 1.86717               |
| ITGB2        | 21         | 46305868       | 46348754      | -      | 1.8659                |
| EME2         | 16         | 1823229        | 1826240       | +      | 1.80979               |
| PTK2B        | 8          | 27168999       | 27316909      | +      | 1.77717               |
| FAM219A      | 9          | 34398182       | 34458569      | -      | 1.7753                |
| NMNAT2       | 1          | 183217372      | 183387635     | -      | 1.73956               |
| MOCOS        | 18         | 33767480       | 33848686      | +      | 1.737                 |
| PLCB2        | 15         | 40580098       | 40600175      | -      | 1.73671               |
| GCLM         | 1          | 94352590       | 94375013      | -      | 1.73021               |
| ADSSL1       | 14         | 105190534      | 105213648     | +      | 1.72613               |
| LINC00957    | 7          | 44078648       | 44083896      | +      | 1.71886               |
| MKRN9P       | 12         | 88176663       | 88178489      | -      | 1.70392               |
| VAMP2        | 17         | 8062465        | 8066294       | -      | 1.70315               |
| CHST11       | 12         | 104850692      | 105155793     | +      | 1.68861               |
| PTPLAD2      | 9          | 21006365       | 21031636      | -      | 1.68735               |
| ADCY9        | 16         | 4012650        | 4166187       | -      | 1.67735               |
| ZNF727       | 7          | 63505821       | 63538928      | +      | 1.676                 |
| PREX1        | 20         | 47240793       | 47444421      | -      | 1.67126               |
| MTSS1        | 8          | 125563011      | 125740749     | -      | 1.66101               |
| HERC2P3      | 15         | 20613650       | 20711434      | -      | 1.65423               |

|                    |             |           |           |   |         |
|--------------------|-------------|-----------|-----------|---|---------|
| NAAA               | 4           | 76831808  | 76862167  | - | 1.64314 |
| SCN5A              | 3           | 38589553  | 38691165  | - | 1.63118 |
| MCEE               | 2           | 71336806  | 71357395  | - | 1.62541 |
| FLCN               | 17          | 17115527  | 17140503  | - | 1.60288 |
| HNRNPUL2-<br>BSCL2 | 11          | 62457734  | 62494857  | - | 1.59257 |
| ABCA7              | 19          | 1040102   | 1065571   | + | 1.58868 |
| ZNF486             | 19          | 20278023  | 20311300  | + | 1.57838 |
| ETV3               | 1           | 157094459 | 157108384 | - | 1.57332 |
| TMEM200C           | 18          | 5890184   | 5892104   | - | 1.57315 |
| UQCRHL             | 1           | 16133657  | 16134195  | - | 1.57235 |
| RNASEL             | 1           | 182542769 | 182558395 | - | 1.55592 |
| HTATIP2            | 11          | 20385231  | 20405330  | + | 1.55223 |
| IER5               | 1           | 181057638 | 181059980 | + | 1.55116 |
| RPRML              | 17          | 45055522  | 45056615  | - | 1.53476 |
| TSSK6              | 19          | 19625028  | 19626470  | - | 1.53236 |
| ANKRD18A           | 9           | 38571361  | 38620361  | - | 1.52864 |
| TIMP2              | 17          | 76849059  | 76921473  | - | 1.52806 |
| RASD1              | 17          | 17397753  | 17399710  | - | 1.5132  |
| MYZAP              | 15          | 57884102  | 57977563  | + | 1.50081 |
| STAG3L5P           | 7           | 99933702  | 99938952  | + | 1.4968  |
| HPCA               | 1           | 33352098  | 33360248  | + | 1.48945 |
| HSF4               | 16          | 67197288  | 67203849  | + | 1.47828 |
| STIM1              | 11          | 3876933   | 4114441   | + | 1.45092 |
| GNAI1              | 7           | 79764140  | 79848726  | + | 1.44357 |
| MAPK7              | 17          | 19281034  | 19286858  | + | 1.44139 |
| APOOP5             | 16          | 59788045  | 59789096  | - | 1.43991 |
| HLA-A              | 6_ssto_hap7 | 1150098   | 29913662  | + | 1.43605 |
| FAM84A             | 2           | 14772810  | 14780169  | + | 1.42164 |
| SYNM               | 15          | 99645286  | 99675801  | + | 1.41178 |
| PKIA               | 8           | 79428336  | 79517503  | + | 1.40459 |
| STARD13            | 13          | 33677272  | 34250933  | - | 1.40261 |
| DYX1C1-CCPG1       | 15          | 55647421  | 55790783  | - | 1.40222 |
| EYA3               | 1           | 28296855  | 28415149  | - | 1.3939  |
| MNT                | 17          | 2287354   | 2304259   | - | 1.38268 |
| PRKAR2A            | 3           | 48788093  | 48885271  | - | 1.38138 |
| SLC25A28           | 10          | 101370275 | 101380222 | - | 1.37891 |
| SERINC3            | 20          | 43124864  | 43150727  | - | 1.37137 |
| BLVRB              | 19          | 40953691  | 40971726  | - | 1.36946 |
| ADIPOR1            | 1           | 202909960 | 202927701 | - | 1.35143 |
| SEC22B             | 1           | 145096407 | 145116998 | + | 1.34893 |
| PHF12              | 17          | 27232271  | 27278509  | - | 1.34879 |

|           |              |           |           |   |         |
|-----------|--------------|-----------|-----------|---|---------|
| KIAA1614  | 1            | 180882313 | 180915240 | + | 1.34765 |
| ZDHHC1    | 16           | 67428322  | 67450340  | - | 1.34184 |
| DYNLL2    | 17           | 56160780  | 56167619  | + | 1.33573 |
| MFSD1     | 3            | 158519715 | 158547509 | + | 1.33549 |
| KBTBD4    | 11           | 47593749  | 47600568  | - | 1.32875 |
| ZBTB43    | 9            | 129567285 | 129600488 | + | 1.32686 |
| ENTPD5    | 14           | 74433181  | 74486027  | - | 1.32495 |
| C14orf142 | 14           | 93669237  | 93673460  | - | 1.32027 |
| CHMP5     | 9            | 33264877  | 33282068  | + | 1.31782 |
| RNF139    | 8            | 125487008 | 125500860 | + | 1.3174  |
| DIRC2     | 3            | 122513901 | 122599987 | + | 1.31647 |
| MID1IP1   | X            | 38660685  | 38665784  | + | 1.30884 |
| TM9SF2    | 13           | 100153628 | 100216303 | + | 1.30783 |
| PLEKHM1   | 17_ctg5_hap1 | 128328    | 43568147  | - | 1.30503 |
| ATP1B3    | 3            | 141595470 | 141645383 | + | 1.30497 |
| PPT2      | 6_ssto_hap7  | 3382242   | 32131459  | + | 1.30378 |
| CLIC2     | X            | 154505496 | 154563991 | - | 1.30032 |
| PRPF8     | 17           | 1553923   | 1588177   | - | 1.29751 |
| TOM1      | 22           | 35695268  | 35743988  | + | 1.29725 |
| PYGB      | 20           | 25228706  | 25278649  | + | 1.29328 |
| ESYT3     | 3            | 138153415 | 138197257 | + | 1.29239 |
| FAM129B   | 9            | 130267617 | 130341287 | - | 1.29145 |
| PSMD1     | 2            | 231921578 | 232037541 | + | 1.28958 |
| GABARAPL2 | 16           | 75600249  | 75611780  | + | 1.28721 |
| ESRRA     | 11           | 64073000  | 64084213  | + | 1.28529 |
| MEF2D     | 1            | 156433513 | 156470635 | - | 1.2823  |
| TMBIM1    | 2            | 219138917 | 219157281 | - | 1.28031 |
| CALCOCO2  | 17           | 46908350  | 46942608  | + | 1.2781  |
| GOSR2     | 17           | 45000486  | 45018734  | + | 1.27738 |
| S100A6    | 1            | 153507076 | 153508718 | - | 1.27694 |
| WDR81     | 17           | 1619817   | 1641894   | + | 1.27622 |
| FAM89A    | 1            | 231154704 | 231175996 | - | 1.27382 |
| MCOLN1    | 19           | 7587496   | 7598896   | + | 1.27292 |
| MAP3K10   | 19           | 40697651  | 40721483  | + | 1.27281 |
| ZNF319    | 16           | 58028573  | 58033763  | - | 1.26794 |
| ZAK       | 2            | 173940565 | 174132738 | + | 1.2671  |
| OXNAD1    | 3            | 16306667  | 16347595  | + | 1.26545 |
| TECPR1    | 7            | 97844755  | 97881564  | - | 1.26021 |
| KLHL36    | 16           | 84682131  | 84695917  | + | 1.25481 |
| LPIN3     | 20           | 39969560  | 39989223  | + | 1.24997 |
| STAG3L2   | 7            | 74298092  | 74306732  | - | 1.24744 |

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|------------|-------------|-----------|-----------|---|---------|
| GPR137     | 11          | 64051811  | 64056973  | + | 1.23724 |
| H2AFZ      | 4           | 100869244 | 100871513 | - | 1.23068 |
| FAM27E3    | 9           | 67784944  | 67786626  | - | 1.2279  |
| AFAP1L2    | 10          | 116054583 | 116164538 | - | 1.22724 |
| RIN3       | 14          | 92980125  | 93155335  | + | 1.22721 |
| KIF17      | 1           | 20990507  | 21044511  | - | 1.22185 |
| SEC24C     | 10          | 75504131  | 75531934  | + | 1.21563 |
| HECTD3     | 1           | 45468220  | 45477028  | - | 1.21411 |
| COPA       | 1           | 160258377 | 160313355 | - | 1.21305 |
| RSBNIL-AS1 | 7           | 77313168  | 77326663  | - | 1.20939 |
| SQSTM1     | 5           | 179233388 | 179265078 | + | 1.20887 |
| KLHL18     | 3           | 47324330  | 47388307  | + | 1.20439 |
| ZNF555     | 19          | 2841433   | 2860473   | + | 1.20269 |
| BCAS3      | 17          | 58755172  | 59470200  | + | 1.20016 |
| KLC4       | 6           | 43027372  | 43042834  | + | 1.19962 |
| PTPDC1     | 9           | 96793076  | 96872139  | + | 1.19953 |
| C14orf37   | 14          | 58470808  | 58618848  | - | 1.19452 |
| RXRA       | 9           | 137218316 | 137332432 | + | 1.19415 |
| FTO        | 16          | 53737875  | 54148380  | + | 1.19311 |
| LOC344967  | 4           | 40044537  | 40058820  | - | 1.19245 |
| TLDC1      | 16          | 84509966  | 84538289  | - | 1.19096 |
| CLPX       | 15          | 65442784  | 65477564  | - | 1.18712 |
| YIPF5      | 5           | 143537723 | 143550279 | - | 1.18286 |
| ENDOD1     | 11          | 94822974  | 94865816  | + | 1.18088 |
| SURF4      | 9           | 136228325 | 136244821 | - | 1.1789  |
| SCAMP2     | 15          | 75137197  | 75165671  | - | 1.17767 |
| PSAP       | 10          | 73576055  | 73611083  | - | 1.17538 |
| SLC25A44   | 1           | 156163723 | 156182588 | + | 1.16728 |
| RAB7A      | 3           | 128444979 | 128533642 | + | 1.16442 |
| ATXN7      | 3           | 63850233  | 63989137  | + | 1.15919 |
| NUFIP2     | 17          | 27582854  | 27621167  | - | 1.15842 |
| MKRN1      | 7           | 140152840 | 140179370 | - | 1.15465 |
| LOC254896  | 8           | 22941868  | 22961071  | + | 1.14851 |
| PIAS1      | 15          | 68346572  | 68480405  | + | 1.14763 |
| RSPRY1     | 16          | 57220241  | 57272948  | + | 1.14671 |
| HSPA9      | 5           | 137890571 | 137911319 | - | 1.1462  |
| SKIV2L     | 6_ssto_hap7 | 3212164   | 31937533  | + | 1.13908 |
| OSBP       | 11          | 59341871  | 59383618  | - | 1.13833 |
| EMC3       | 3           | 10005636  | 10028523  | - | 1.13652 |
| THAP6      | 4           | 76439654  | 76455237  | + | 1.13453 |
| STX12      | 1           | 28099694  | 28150964  | + | 1.11803 |

|              |    |           |           |   |          |
|--------------|----|-----------|-----------|---|----------|
| HCCS         | X  | 11129406  | 11141205  | + | 1.11749  |
| TAF12        | 1  | 28929609  | 28969605  | - | 1.11704  |
| MESDC1       | 15 | 81293295  | 81296346  | + | 1.11191  |
| GADD45G      | 9  | 92219927  | 92221470  | + | 1.10348  |
| RHOA         | 3  | 49396579  | 49449527  | - | 1.08749  |
| ASTN1        | 1  | 176826441 | 177134041 | - | 1.08508  |
| ECD          | 10 | 74894282  | 74927854  | - | 1.07666  |
| LAMTOR3      | 4  | 100799495 | 100815704 | - | -1.08305 |
| RNF44        | 5  | 175953700 | 175964422 | - | -1.08391 |
| HNRNPDL      | 4  | 83343717  | 83351379  | - | -1.09082 |
| ZNF407       | 18 | 72342919  | 72777629  | + | -1.09614 |
| MAP7D3       | X  | 135295379 | 135338642 | - | -1.1053  |
| LOC100129361 | 12 | 11323780  | 11328620  | + | -1.12191 |
| DZANK1       | 20 | 18364011  | 18447830  | - | -1.13122 |
| WWC2         | 4  | 184020463 | 184241930 | + | -1.13131 |
| ING5         | 2  | 242641456 | 242668897 | + | -1.13132 |
| GIT2         | 12 | 110367607 | 110434195 | - | -1.13264 |
| TM2D3        | 15 | 102182049 | 102192595 | - | -1.13901 |
| RUSC1-AS1    | 1  | 155290251 | 155293939 | - | -1.13993 |
| NADK2        | 5  | 36192691  | 36242382  | - | -1.14161 |
| RTEL1        | 20 | 62289163  | 62327607  | + | -1.14575 |
| TCEAL8       | X  | 102507923 | 102510122 | - | -1.14941 |
| SPDL1        | 5  | 169010638 | 169031782 | + | -1.15387 |
| ZCCHC8       | 12 | 122956146 | 122985621 | - | -1.16359 |
| MDH1B        | 2  | 207602489 | 207630274 | - | -1.16858 |
| IFNGR2       | 21 | 34775202  | 34809829  | + | -1.16925 |
| CXorf23      | X  | 19930980  | 19988383  | - | -1.17025 |
| FRG1         | 4  | 190861974 | 190884360 | + | -1.1777  |
| ZSCAN9       | 6  | 28193029  | 28201265  | + | -1.18814 |
| USP42        | 7  | 6144550   | 6201196   | + | -1.18876 |
| ATG12        | 5  | 115163894 | 115177549 | - | -1.19193 |
| CARF         | 2  | 203776941 | 203851209 | + | -1.19386 |
| HIST1H1C     | 6  | 26055968  | 26056700  | - | -1.19716 |
| PHC1         | 12 | 9067316   | 9094061   | + | -1.19765 |
| SECISBP2L    | 15 | 49280835  | 49338761  | - | -1.2011  |
| TOP2B        | 3  | 25639396  | 25705864  | - | -1.20271 |
| PIGB         | 15 | 55611133  | 55647847  | + | -1.2065  |
| GATAD1       | 7  | 92076762  | 92089382  | + | -1.20707 |
| PPHLN1       | 12 | 42719947  | 42842423  | + | -1.20845 |
| RBM19        | 12 | 114254543 | 114404177 | - | -1.21448 |
| CCDC88C      | 14 | 91737667  | 91884189  | - | -1.21455 |

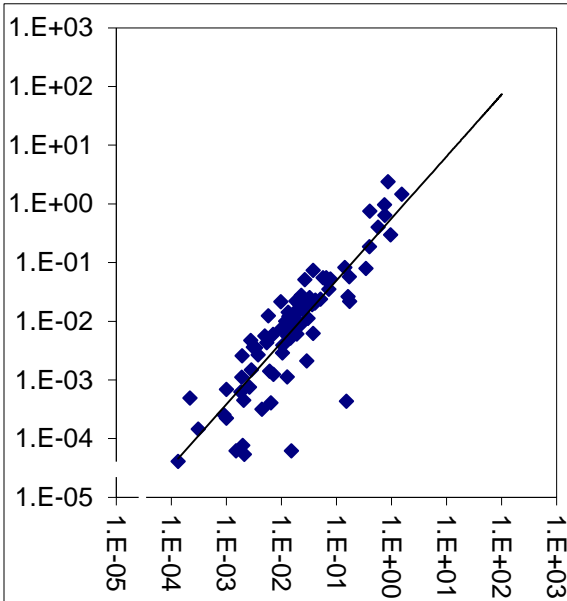
|           |             |           |           |   |          |
|-----------|-------------|-----------|-----------|---|----------|
| RNF138    | 18          | 29671818  | 29711525  | + | -1.21865 |
| MNAT1     | 14          | 61201459  | 61435399  | + | -1.2339  |
| FJX1      | 11          | 35639735  | 35642422  | + | -1.23581 |
| C1orf52   | 1           | 85715637  | 85725356  | - | -1.23745 |
| ZNF169    | 9           | 97021578  | 97065292  | + | -1.24774 |
| N6AMT1    | 21          | 30244513  | 30257696  | - | -1.24812 |
| LINC00998 | 7           | 112756773 | 112758638 | - | -1.25062 |
| UCK2      | 1           | 165796732 | 165880856 | + | -1.25073 |
| RSL1D1    | 16          | 11928055  | 11945443  | - | -1.25096 |
| RAB3IP    | 12          | 70132466  | 70216985  | + | -1.25528 |
| APAF1     | 12          | 99039078  | 99129212  | + | -1.25549 |
| TEKT4P2   | 21          | 9907189   | 9968594   | - | -1.25804 |
| POLR1C    | 6           | 43484777  | 43489247  | + | -1.25846 |
| ZNF74     | 22          | 20748405  | 20762754  | + | -1.25997 |
| HIST1H2BK | 6           | 27106072  | 27114638  | - | -1.26072 |
| NPM1      | 5           | 170814708 | 170837889 | + | -1.26122 |
| EIF3C     | 16          | 28390903  | 28747051  | + | -1.26145 |
| NPHP3     | 3           | 132399453 | 132441304 | - | -1.26174 |
| DLG1      | 3           | 196769431 | 197025448 | - | -1.26528 |
| HCG8      | 6_ssto_hap7 | 1219726   | 29981700  | - | -1.26818 |
| TDRD3     | 13          | 60970591  | 61148014  | + | -1.27252 |
| WARS2     | 1           | 119573839 | 119683296 | - | -1.2741  |
| PHKA2     | X           | 18910416  | 19002481  | - | -1.27564 |
| ALG10B    | 12          | 38710557  | 38723529  | + | -1.27866 |
| IDI1      | 10          | 1085964   | 1095062   | - | -1.27877 |
| PRKD2     | 19          | 47177573  | 47220385  | - | -1.28338 |
| ANAPC7    | 12          | 110810705 | 110841536 | - | -1.28362 |
| NEDD4L    | 18          | 55711610  | 56068773  | + | -1.28409 |
| IPO8      | 12          | 30781915  | 30848930  | - | -1.28571 |
| ZNHIT6    | 1           | 86115106  | 86174117  | - | -1.29108 |
| CROCC     | 1           | 17248445  | 17299475  | + | -1.29865 |
| NACA      | 12          | 57106211  | 57119327  | - | -1.30339 |
| MTX3      | 5           | 79272539  | 79287089  | - | -1.30457 |
| PTRHD1    | 2           | 25013136  | 25016252  | - | -1.31352 |
| TTC33     | 5           | 40711678  | 40756073  | - | -1.31977 |
| LRRC40    | 1           | 70610485  | 70671362  | - | -1.32137 |
| CCDC14    | 3           | 123632274 | 123680256 | - | -1.32234 |
| SUDS3     | 12          | 118814358 | 118855841 | + | -1.33179 |
| ZNF140    | 12          | 133657037 | 133684259 | + | -1.33382 |
| NDUFA5    | 7           | 123181083 | 123197959 | - | -1.33767 |
| PPA2      | 4           | 106290234 | 106395228 | - | -1.33974 |

|              |    |           |           |   |          |
|--------------|----|-----------|-----------|---|----------|
| DCBLD2       | 3  | 98514814  | 98620534  | - | -1.34346 |
| IMMP2L       | 7  | 110303106 | 111202574 | - | -1.34688 |
| COMMD10      | 5  | 115420727 | 115628979 | + | -1.35281 |
| SEPHS1       | 10 | 13359438  | 13390299  | - | -1.35534 |
| NFATC2       | 20 | 50003494  | 50179371  | - | -1.35748 |
| CEP135       | 4  | 56814974  | 56899530  | + | -1.3608  |
| TMEM220      | 17 | 10616639  | 10633647  | - | -1.36411 |
| PGM2L1       | 11 | 74041361  | 74109503  | - | -1.37177 |
| L3MBTL3      | 6  | 130339728 | 130462595 | + | -1.37235 |
| TMA16        | 4  | 164415673 | 164441692 | + | -1.3728  |
| WDR77        | 1  | 111982512 | 111991831 | - | -1.37912 |
| LBR          | 1  | 225589204 | 225616558 | - | -1.38056 |
| NLN          | 5  | 65018023  | 65125112  | + | -1.38189 |
| FUT1         | 19 | 49251268  | 49258648  | - | -1.38278 |
| SERF1B       | 5  | 69321078  | 70214352  | + | -1.38545 |
| C12orf45     | 12 | 105380098 | 105388506 | + | -1.38697 |
| ADAM1A       | 12 | 112336867 | 112339707 | + | -1.38905 |
| NFKBIE       | 6  | 44225903  | 44233526  | - | -1.38947 |
| DPH5         | 1  | 101455180 | 101491363 | - | -1.39075 |
| ZNF681       | 19 | 23921997  | 23941694  | - | -1.39198 |
| TSHZ1        | 18 | 72922710  | 73001906  | + | -1.39363 |
| PRKCI        | 3  | 169940220 | 170023771 | + | -1.40073 |
| HSPG2        | 1  | 22148737  | 22263751  | - | -1.40283 |
| LONRF1       | 8  | 12579406  | 12612993  | - | -1.40439 |
| FAM161A      | 2  | 62051983  | 62081279  | - | -1.40476 |
| MCOLN2       | 1  | 85391266  | 85462797  | - | -1.41279 |
| C12orf60     | 12 | 14956506  | 14976792  | + | -1.41351 |
| ADM5         | 19 | 50191942  | 50194248  | + | -1.41816 |
| F2RL1        | 5  | 76114833  | 76131141  | + | -1.41876 |
| RSL24D1      | 15 | 55473512  | 55489232  | - | -1.41939 |
| TMEM183A     | 1  | 202976534 | 202993198 | + | -1.42322 |
| RTKN2        | 10 | 63952845  | 64028623  | - | -1.43339 |
| GLB1L2       | 11 | 134201768 | 134246219 | + | -1.44439 |
| ZNF596       | 8  | 182137    | 197341    | + | -1.44515 |
| PCDHB16      | 5  | 140561265 | 140565797 | + | -1.4581  |
| LOC100133091 | 7  | 76178658  | 76257300  | + | -1.46254 |
| DTWD1        | 15 | 49913226  | 49937334  | + | -1.46696 |
| SGTB         | 5  | 64961755  | 65017942  | - | -1.46797 |
| TFAP4        | 16 | 4307187   | 4323002   | - | -1.47735 |
| CAPS         | 19 | 5914193   | 5916223   | + | -1.48887 |
| FBRSL1       | 12 | 133067157 | 133161774 | + | -1.49516 |

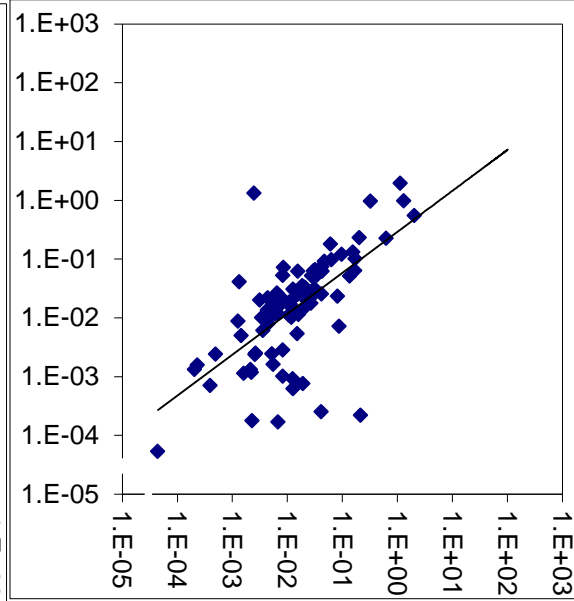
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|--------------|-------------|-----------|-----------|---|----------|
| CHRNA10      | 11          | 3686817   | 3692615   | - | -1.51081 |
| ALKBH2       | 12          | 109525993 | 109531294 | - | -1.51986 |
| FAM86A       | 16          | 5134301   | 5147790   | - | -1.52015 |
| LOC100506548 | 5           | 40825365  | 40829245  | - | -1.52016 |
| SYCE1L       | 16          | 77233349  | 77246977  | + | -1.53511 |
| BEND3        | 6           | 107386385 | 107435637 | - | -1.54651 |
| DGKA         | 12          | 56324946  | 56347808  | + | -1.54827 |
| GPR125       | 4           | 22388997  | 22517678  | - | -1.55067 |
| KLF5         | 13          | 73629114  | 73651681  | + | -1.55448 |
| CKAP4        | 12          | 106631659 | 106641714 | - | -1.56377 |
| MECOM        | 3           | 168801287 | 169381564 | - | -1.56982 |
| ARNT2        | 15          | 80696692  | 80890278  | + | -1.60687 |
| FAM133B      | 7           | 92190072  | 92219709  | - | -1.61605 |
| PUS7         | 7           | 105096960 | 105162686 | - | -1.61787 |
| PLCE1        | 10          | 95753746  | 96088149  | + | -1.73754 |
| TES          | 7           | 115850547 | 115898838 | + | -1.75919 |
| POLR3G       | 5           | 89770681  | 89810370  | + | -1.86241 |
| EGFL8        | 6_ssto_hap7 | 3393402   | 32136063  | + | -2.09768 |
| GPHA2        | 11          | 64701943  | 64703361  | - | -2.26238 |
| APOC1        | 19          | 45417921  | 45422607  | + | -2.48786 |



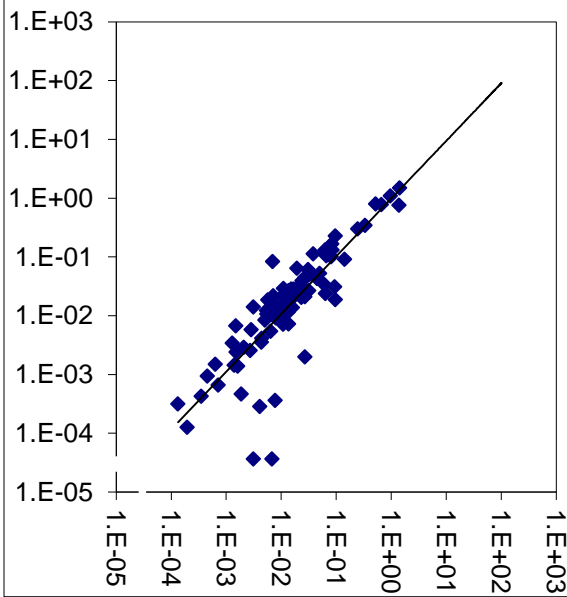
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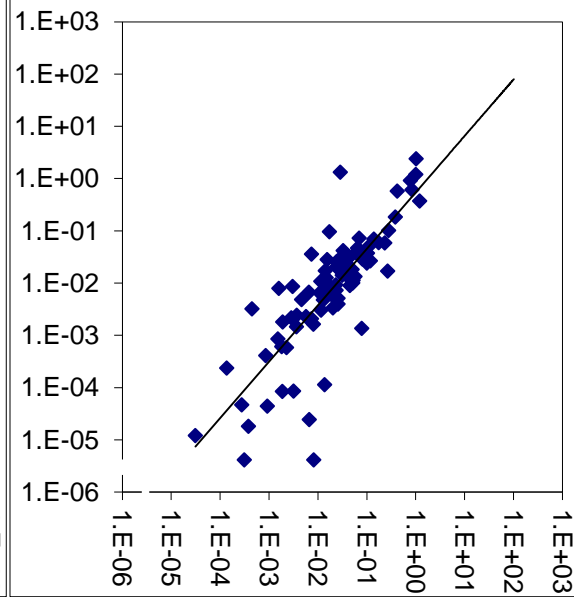
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**Supplementary Figure 1:** The SABioSciences RT<sup>2</sup> qPCR array for cancer drug targets was run on the patient's tumor and their matched untreated PDX tumor. Differences in relative gene expression for each target was calculated and the  $2^{\Delta\Delta Ct}$  value was determined. Correlation of expression is seen in each of the 4 pairs analyzed.