# Table S 1

| **Microarray study following *SYK* knockdown in MCF10A** | | | | | | | **TCGA study of CN/mut altered patient cases** | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **FINAL 55gene ID** | **FINAL 55gene GENE SYMBOL** | **Probe set** | **Description** | **mean of log intensities for collagen control** | **mean of log intensities for collagen SYK KD** | **FoldDiff (mRNA)[1]** | **Num Cases Altered** | **% Cases Altered** | **GENE_ID** | **COMMON** | **Ave CN gain/loss** |
| 40 | SPRR1A | 213796_at | small proline-rich protein 1A | 5.3513 | 1.23999 | **17.28** | 89 | **12.80%** | 6698 | SPRR1A | **0.82** |
| 40 | SPRR1A | 214549_x_at | small proline-rich protein 1A | 6.63511 | 3.57669 | **8.33** | 89 | **12.80%** | 6698 | SPRR1A | **0.82** |
| 4 | AMOTL2 | 203002_at | angiomotin like 2 | 4.05109 | 2.55416 | **2.82** | 10 | **1.40%** | 51421 | AMOTL2 | **0.17** |
| 29 | NEBL | 203961_at | nebulette | 4.04029 | 2.61005 | **2.69** | 23 | **3.30%** | 10529 | NEBL | **0.18** |
| 29 | NEBL | 203962_s_at | nebulette | 4.44726 | 3.03057 | **2.67** | 23 | **3.30%** | 10529 | NEBL | **0.18** |
| 35 | RHOBTB3 | 202975_s_at | Rho-related BTB domain containing 3 | 3.29064 | 2.05175 | **2.36** | 8 | **1.10%** | 22836 | RHOBTB3 | **-0.14** |
| 32 | RAB11FIP1 | 219681_s_at | RAB11 family interacting protein 1 (class I) | 3.33121 | 2.11184 | **2.33** | 104 | **14.90%** | 80223 | RAB11FIP1 | **0.20** |
| 49 | TPM1 | 206116_s_at | tropomyosin 1 (alpha) | 4.9529 | 3.80533 | **2.22** | 7 | **1.00%** | 7168 | TPM1 | **-0.22** |
| 35 | RHOBTB3 | 202976_s_at | Rho-related BTB domain containing 3 | 2.96163 | 1.85266 | **2.16** | 8 | **1.10%** | 22836 | RHOBTB3 | **-0.14** |
| 28 | MYL9 | 201058_s_at | myosin, light chain 9, regulatory | 2.44787 | 1.35916 | **2.13** | 19 | **2.70%** | 10398 | MYL9 | **0.47** |
| 49 | TPM1 | 210987_x_at | tropomyosin 1 (alpha) | 5.3621 | 4.30889 | **2.08** | 7 | **1.00%** | 7168 | TPM1 | **-0.22** |
| 49 | TPM1 | 206117_at | tropomyosin 1 (alpha) | 2.714 | 1.67104 | **2.06** | 7 | **1.00%** | 7168 | TPM1 | **-0.22** |
| 34 | RAB25 | 218186_at | RAB25, member RAS oncogene family | 6.18144 | 5.18108 | **2.00** | 85 | **12.20%** | 57111 | RAB25 | **0.81** |
| 49 | TPM1 | 210986_s_at | tropomyosin 1 (alpha) | 6.04476 | 5.07147 | **1.96** | 7 | **1.00%** | 7168 | TPM1 | **-0.22** |

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|---|---|---|---|---|---|---|---|---|---|---|---|
| 37 | RND3 | 212724_at | Rho family GTPase 3 | 3.9234 | 2.97365 | **1.93** | 3 | **0.40%** | 390 | RND3 | **-0.17** |
| 26 | MMP7 | 204259_at | matrix metallopeptidase 7 (matrilysin, uterine) | 1.85931 | 0.92773 | **1.91** | 14 | **2.00%** | 4316 | MMP7 | **-0.31** |
| 27 | MUC1 | 207847_s_at | mucin 1, cell surface associated | 4.6449 | 3.73202 | **1.88** | 94 | **13.50%** | 4582 | MUC1 | **0.84** |
| 11 | CORO1A | 209083_at | coronin, actin binding protein, 1A | 2.77829 | 1.86761 | **1.88** | 37 | **5.30%** | 11151 | CORO1A | **0.52** |
| 46 | TIMP2 | 203167_at | TIMP metallopeptidase inhibitor 2 | 3.60008 | 2.69077 | **1.88** | 47 | **6.80%** | 7077 | TIMP2 | **0.34** |
| 27 | MUC1 | 213693_s_at | mucin 1, cell surface associated | 5.90508 | 5.00689 | **1.86** | 94 | **13.50%** | 4582 | MUC1 | **0.84** |
| 36 | RHOD | 209885_at | ras homolog gene family, member D | 5.77086 | 4.89576 | **1.83** | 33 | **4.70%** | 29984 | RHOD | **0.18** |
| 52 | VILL | 209950_s_at | villin-like | 1.85609 | 1.00962 | **1.80** | 9 | **1.30%** | 50853 | VILL | **-0.12** |
| 5 | AP1M2 | 65517_at | adaptor-related protein complex 1, mu 2 subunit | 3.91307 | 3.08498 | **1.78** | 17 | **2.40%** | 10053 | AP1M2 | **-0.03** |
| 5 | AP1M2 | 218261_at | adaptor-related protein complex 1, mu 2 subunit | 4.74543 | 3.91829 | **1.77** | 17 | **2.40%** | 10053 | AP1M2 | **-0.03** |
| 29 | NEBL | 207279_s_at | nebulette | 2.16513 | 1.35608 | **1.75** | 23 | **3.30%** | 10529 | NEBL | **0.18** |
| 9 | CHN1 | 212624_s_at | chimerin (chimaerin) 1 | 4.32125 | 3.58034 | **1.67** | 6 | **0.90%** | 1123 | CHN1 | **-0.13** |
| 44 | SYK | 207540_s_at | spleen tyrosine kinase | 2.09222 | 1.35864 | **1.66** | 11 | **1.60%** | 6850 | SYK | **-0.14** |
| 36 | RHOD | 31846_at | ras homolog gene family, member D | 6.65006 | 5.92047 | **1.66** | 33 | **4.70%** | 29984 | RHOD | **0.18** |
| 50 | TRAK2 | 202124_s_at | trafficking protein, kinesin binding 2 | 2.90888 | 2.20315 | **1.63** | 12 | **1.70%** | 66008 | TRAK2 | **-0.12** |
| 42 | SPTBN2 | 205155_s_at | spectrin, beta, non-erythrocytic 2 | 2.7319 | 2.06609 | **1.59** | 42 | **6.00%** | 6712 | SPTBN2 | **0.20** |

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|---|---|---|---|---|---|---|---|---|---|---|---|
| 35 | RHOBTB3 | 216048_s_at | Rho-related BTB domain containing 3 | 1.73529 | 1.08295 | **1.57** | 8 | **1.10%** | 22836 | RHOBTB3 | **-0.14** |
| 30 | PCDH9 | 219737_s_at | protocadherin 9 | 2.30688 | 1.67923 | **1.55** | 18 | **2.60%** | 5101 | PCDH9 | **-0.36** |
| 31 | RAB11A | 200864_s_at | RAB11A, member RAS oncogene family | 3.92712 | 3.3079 | **1.54** | 8 | **1.10%** | 8766 | RAB11A | **-0.21** |
| 1 | ABLIM1 | 200965_s_at | actin binding LIM protein 1 | 4.80373 | 4.19058 | **1.53** | 8 | **1.10%** | 3983 | ABLIM1 | **-0.20** |
| 7 | CDC42EP4 | 214721_x_at | CDC42 effector protein (Rho GTPase binding) 4 | 2.86751 | 2.26813 | **1.52** | 56 | **8.00%** | 23580 | CDC42EP4 | **0.37** |
| 50 | TRAK2 | 202125_s_at | trafficking protein, kinesin binding 2 | 2.74738 | 2.15236 | **1.51** | 12 | **1.70%** | 66008 | TRAK2 | **-0.12** |
| 51 | VAMP8 | 202546_at | vesicle-associated membrane protein 8 (endobrevin) | 6.43236 | 5.84249 | **1.51** | 7 | **1.00%** | 8673 | VAMP8 | **0.03** |
| 19 | GPER | 210640_s_at | G protein-coupled estrogen receptor 1 | 1.66389 | 2.24987 | **0.67** | 11 | **1.60%** | 2852 | GPER | **0.15** |
| 2 | ADAM12 | 213790_at | ADAM metallopeptidase domain 12 (meltrin alpha) | 1.01558 | 1.61077 | **0.66** | 17 | **2.40%** | 8038 | ADAM12 | **-0.16** |
| 20 | KIF20A | 218755_at | kinesin family member 20A | 3.93348 | 4.52913 | **0.66** | 4 | **0.60%** | 10112 | KIF20A | **-0.07** |
| 24 | MARCKSL1 | 200644_at | MARCKS-like 1 | 2.2633 | 2.87432 | **0.65** | 7 | **1.00%** | 65108 | MARCKSL1 | **-0.24** |
| 54 | WASF1 | 204165_at | WAS protein family, member 1 | 2.45494 | 3.06884 | **0.65** | 20 | **2.90%** | 8936 | WASF1 | **-0.14** |
| 17 | EGFR | 211607_x_at | epidermal growth factor receptor (erythroblastic leukemia viral (v-erb-b) oncogene homolog, avian) | 2.16901 | 2.80621 | **0.64** | 21 | **3.00%** | 1956 | EGFR | **0.27** |

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|---|---|---|---|---|---|---|---|---|---|---|---|
| 16 | ECT2 | 219787_s_at | epithelial cell transforming sequence 2 oncogene | 3.15335 | 3.79151 | **0.64** | 37 | **5.30%** | 1894 | ECT2 | **0.35** |
| 21 | KIF2C | 211519_s_at | kinesin family member 2C | 3.04305 | 3.68307 | **0.64** | 10 | **1.40%** | 11004 | KIF2C | **-0.11** |
| 17 | EGFR | 210984_x_at | epidermal growth factor receptor (erythroblastic leukemia viral (v-erb-b) oncogene homolog, avian) | 2.33473 | 2.9983 | **0.63** | 21 | **3.00%** | 1956 | EGFR | **0.27** |
| 17 | EGFR | 201984_s_at | epidermal growth factor receptor (erythroblastic leukemia viral (v-erb-b) oncogene homolog, avian) | 2.98141 | 3.65271 | **0.63** | 21 | **3.00%** | 1956 | EGFR | **0.27** |
| 21 | KIF2C | 209408_at | kinesin family member 2C | 3.98417 | 4.68218 | **0.62** | 10 | **1.40%** | 11004 | KIF2C | **-0.11** |
| 10 | CKAP4 | 200999_s_at | cytoskeleton-associated protein 4 | 3.94643 | 4.67124 | **0.61** | 4 | **0.60%** | 10970 | CKAP4 | **0.01** |
| 25 | MET | 203510_at | met proto-oncogene (hepatocyte growth factor receptor) | 4.11472 | 4.84654 | **0.60** | 9 | **1.30%** | 4233 | MET | **0.10** |
| 12 | CTNNAL1 | 202468_s_at | catenin (cadherin-associated protein), alpha-like 1 | 4.07129 | 4.81079 | **0.60** | 8 | **1.10%** | 8727 | CTNNAL1 | **-0.16** |
| 22 | LAMP1 | 201551_s_at | lysosomal-associated membrane protein 1 | 3.33078 | 4.0833 | **0.59** | 29 | **4.20%** | 3916 | LAMP1 | **-0.19** |
| 39 | SMTN | 209427_at | smoothelin | 3.55693 | 4.31091 | **0.59** | 9 | **1.30%** | 6525 | SMTN | **-0.31** |

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|---|---|---|---|---|---|---|---|---|---|---|---|
| 33 | RAB20 | 219622_at | RAB20, member RAS oncogene family | 2.85501 | 3.63536 | **0.58** | 28 | **4.00%** | 55647 | RAB20 | **-0.19** |
| 38 | RRAS | 212647_at | related RAS viral (r-ras) oncogene homolog | 3.32575 | 4.13953 | **0.57** | 18 | **2.60%** | 6237 | RRAS | **0.09** |
| 15 | CXCL2 | 209774_x_at | chemokine (C-X-C motif) ligand 2 | 1.38434 | 2.20515 | **0.57** | 24 | **3.40%** | 2920 | CXCL2 | **-0.02** |
| 3 | ADAM15 | 217007_s_at | ADAM metallopeptidase domain 15 | 3.50458 | 4.32974 | **0.56** | 94 | **13.50%** | 8751 | ADAM15 | **0.84** |
| 39 | SMTN | 207390_s_at | smoothelin | 3.02705 | 3.86486 | **0.56** | 9 | **1.30%** | 6525 | SMTN | **-0.31** |
| 23 | LAMP2 | 200821_at | lysosomal-associated membrane protein 2 | 2.99777 | 3.83674 | **0.56** | 9 | **1.30%** | 3920 | LAMP2 | **-0.03** |
| 2 | ADAM12 | 202952_s_at | ADAM metallopeptidase domain 12 (meltrin alpha) | 1.31031 | 2.18956 | **0.54** | 17 | **2.40%** | 8038 | ADAM12 | **-0.16** |
| 55 | WASF2 | 221725_at | WAS protein family, member 2 | 3.80122 | 4.70557 | **0.53** | 5 | **0.70%** | 10163 | WASF2 | **-0.36** |
| 17 | EGFR | 201983_s_at | epidermal growth factor receptor (erythroblastic leukemia viral (v-erb-b) oncogene homolog, avian) | 4.65262 | 5.56341 | **0.53** | 21 | **3.00%** | 1956 | EGFR | **0.27** |
| 45 | TIMP1 | 201666_at | TIMP metallopeptidase inhibitor 1 | 6.4029 | 7.3157 | **0.53** | 12 | **1.70%** | 7076 | TIMP1 | **0.02** |
| 14 | CXCL1 | 204470_at | chemokine (C-X-C motif) ligand 1 (melanoma growth stimulating activity, alpha) | 1.24742 | 2.16559 | **0.53** | 23 | **3.30%** | 2919 | CXCL1 | **-0.02** |

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|---|---|---|---|---|---|---|---|---|---|---|---|
| 6 | AXL | 202686_s_at | AXL receptor tyrosine kinase | 3.52507 | 4.47528 | **0.52** | 19 | **2.70%** | 558 | AXL | **0.04** |
| 18 | FSCN1 | 201564_s_at | fascin homolog 1, actin-bundling protein (Strongylocentrotus purpuratus) | 4.15038 | 5.26761 | **0.46** | 9 | **1.30%** | 6624 | FSCN1 | **0.18** |
| 47 | TNNT1 | 213201_s_at | troponin T type 1 (skeletal, slow) | 2.15726 | 3.39845 | **0.42** | 23 | **3.30%** | 7138 | TNNT1 | **0.14** |
| 18 | FSCN1 | 210933_s_at | fascin homolog 1, actin-bundling protein (Strongylocentrotus purpuratus) | 3.91259 | 5.16952 | **0.42** | 9 | **1.30%** | 6624 | FSCN1 | **0.18** |
| 53 | VIM | 201426_s_at | vimentin | 3.68115 | 5.4293 | **0.30** | 22 | **3.20%** | 7431 | VIM | **0.21** |

[1] **>=1.5 down-regulated genes; <= 0.67 up-regulated genes**