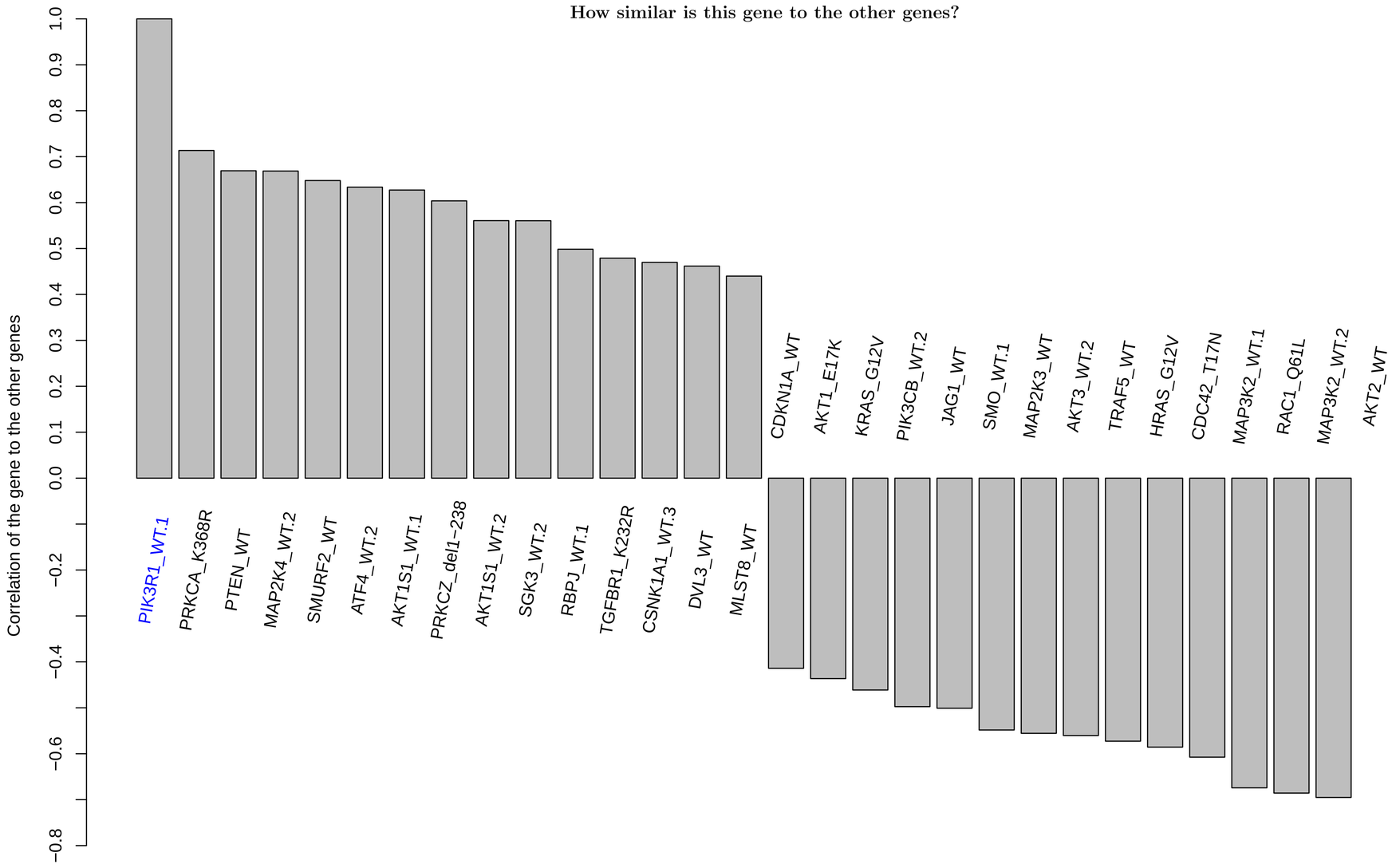
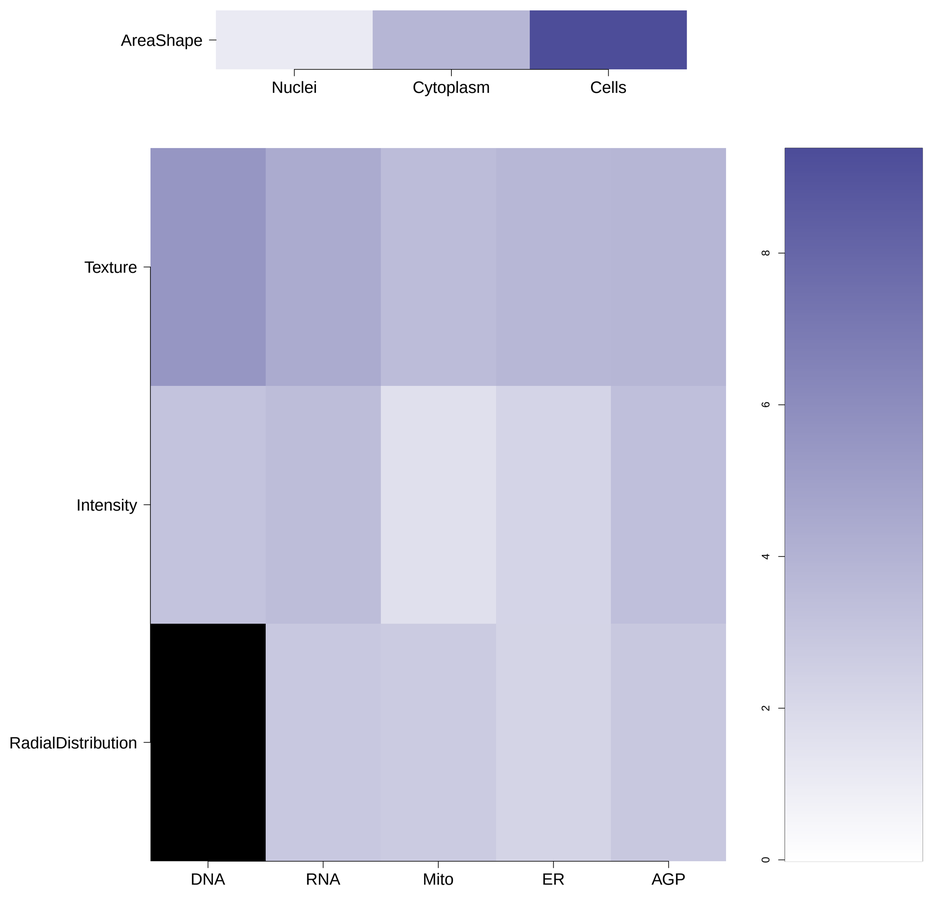
PIK3R1_WT.1 - in Canonical PI3K/AKT

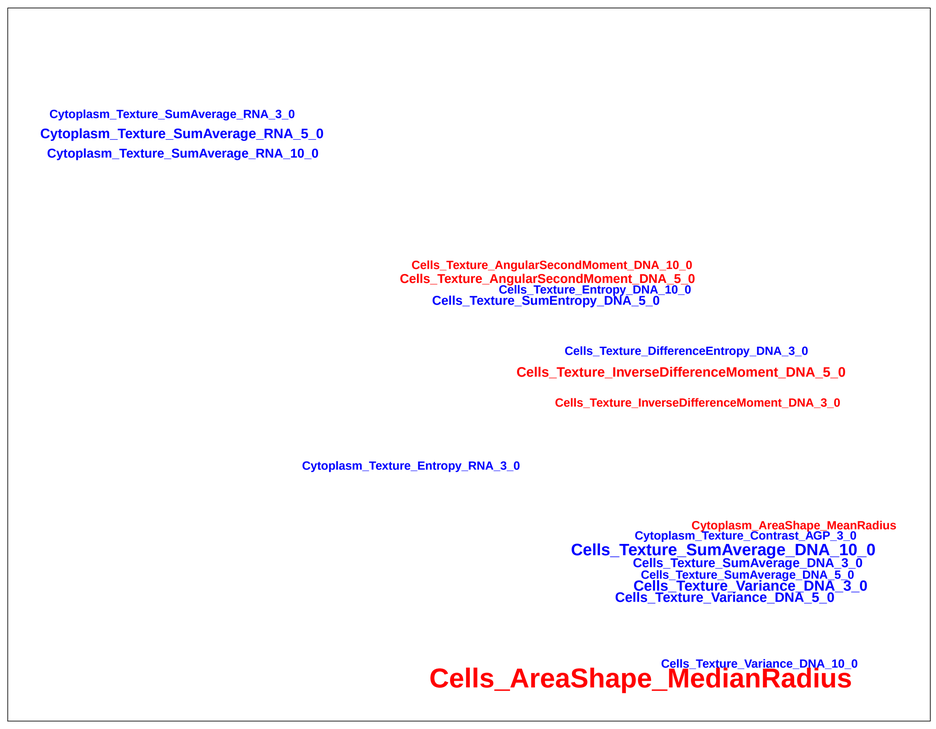
**How similar is this gene to the other genes?**

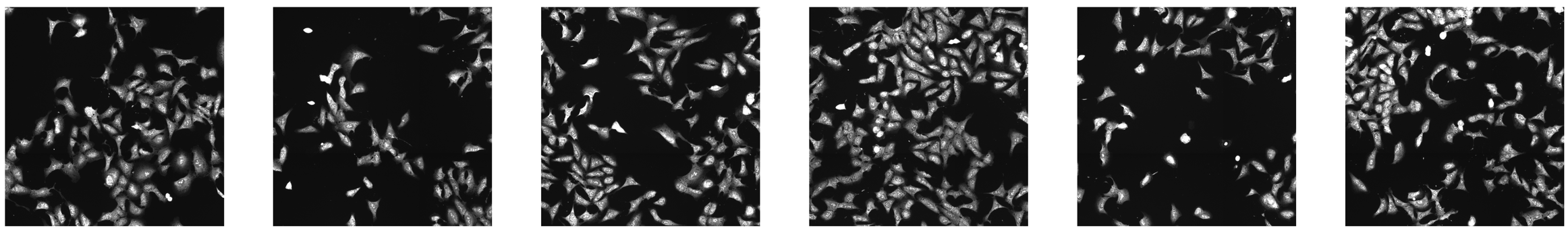
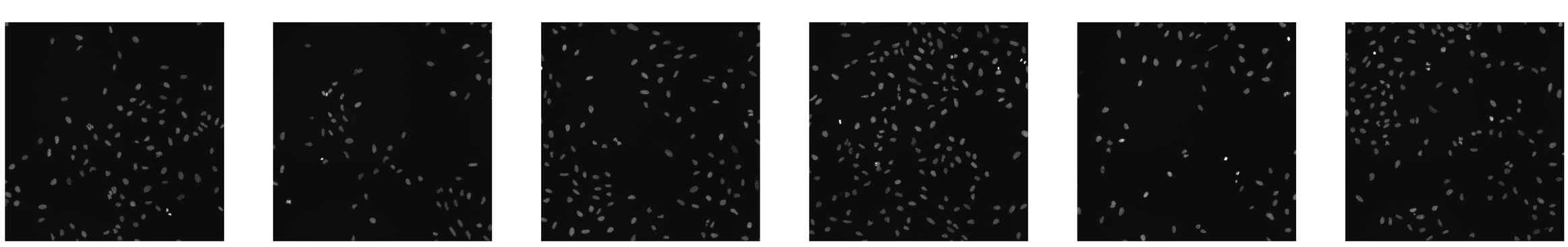



What groups of morphological features are distinguishing in the cluster relative to the untreated samples? (maximum of absolute m-score for the features belonging to the same category; m-score defined as median of a feature z-score across genes in the cluster) Black means no feature is available in the category

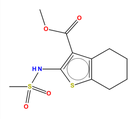
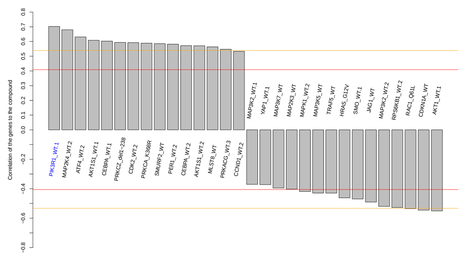
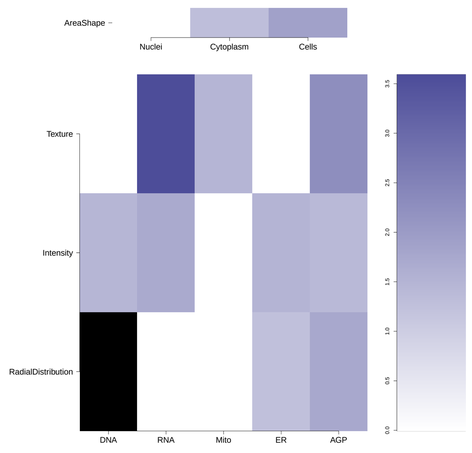
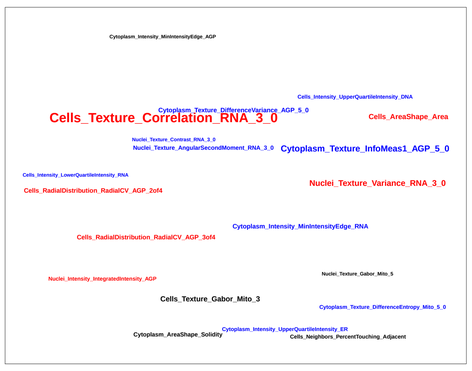
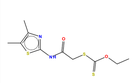
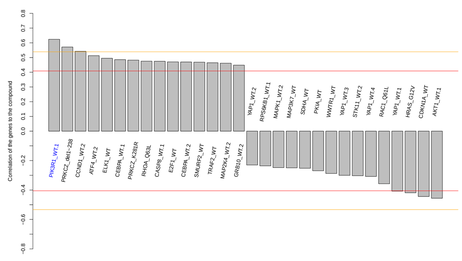
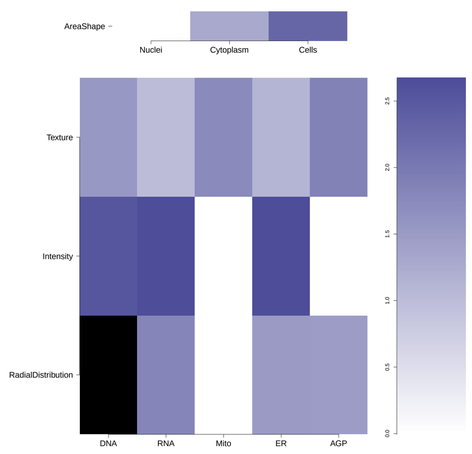
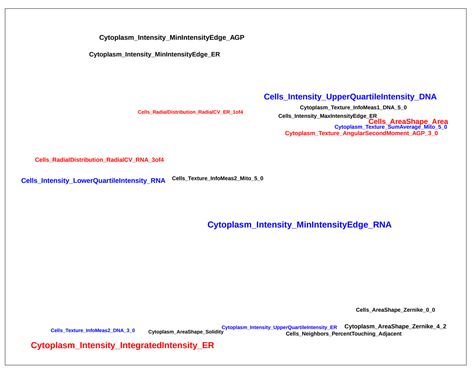
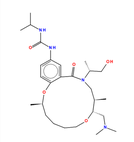
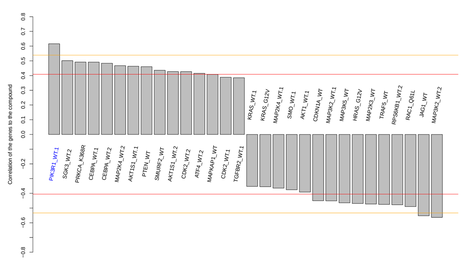
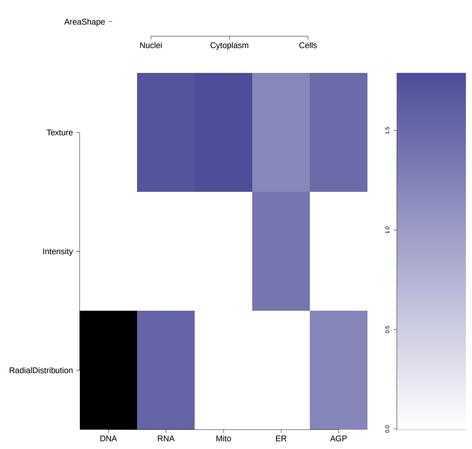
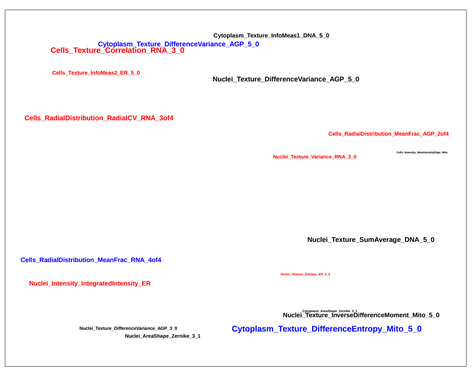
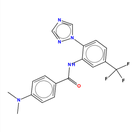
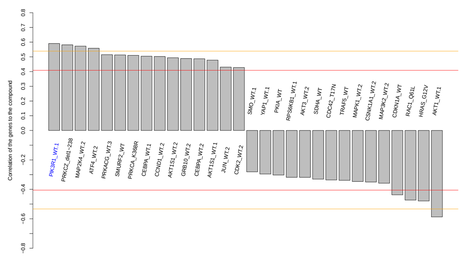
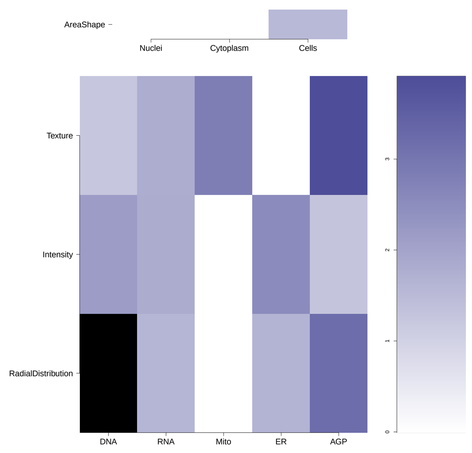
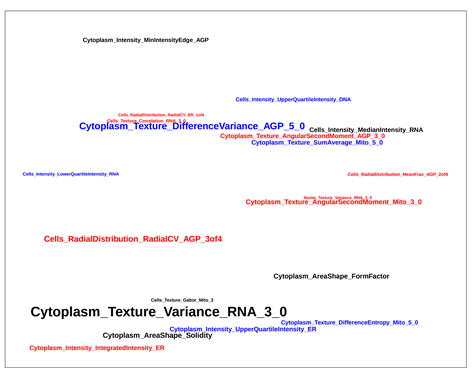
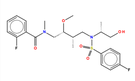
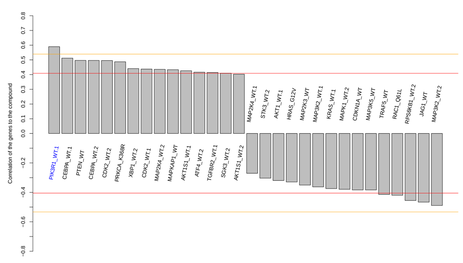
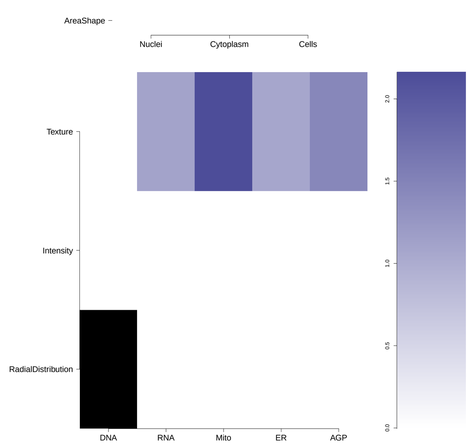
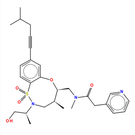
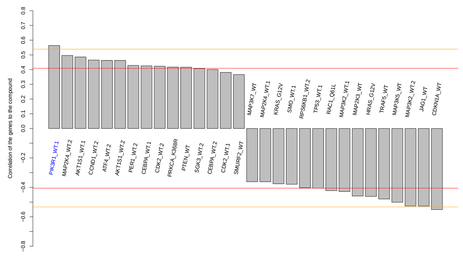
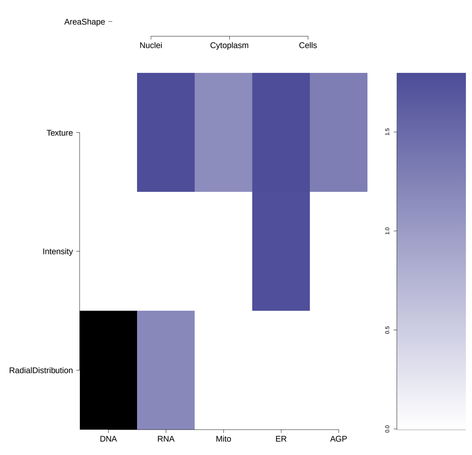


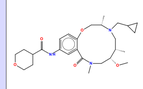
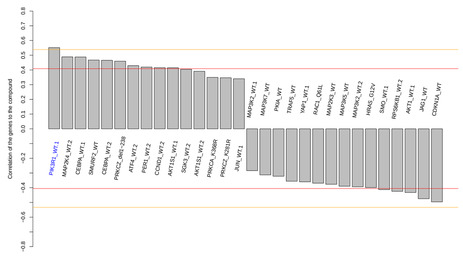
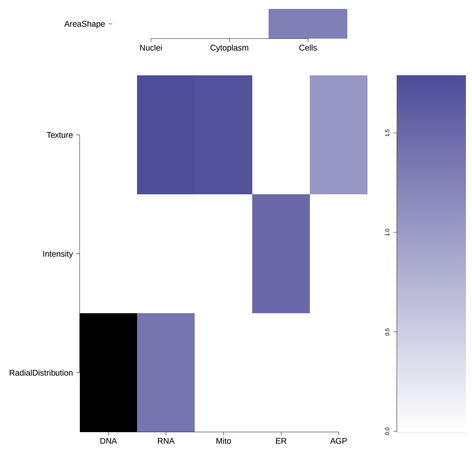
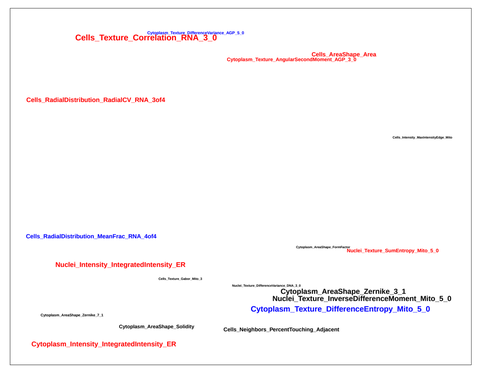
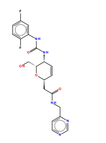
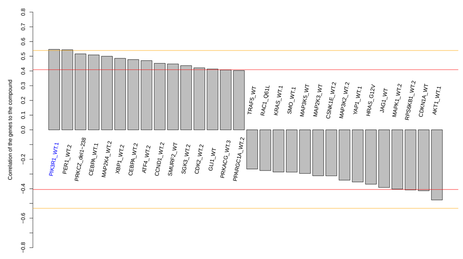
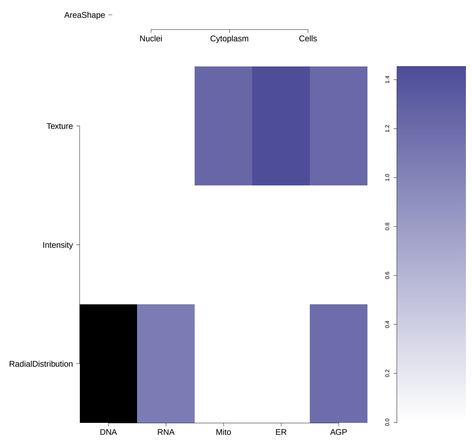
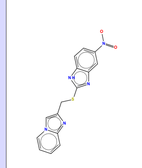
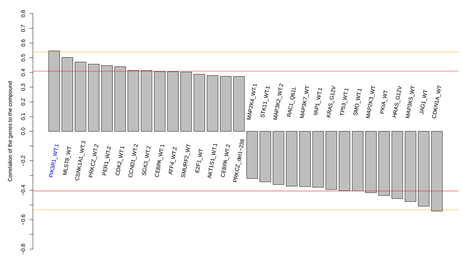
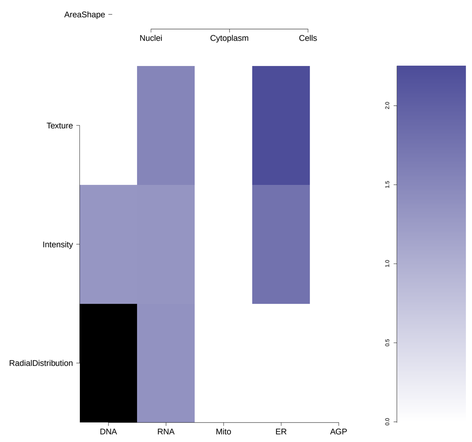
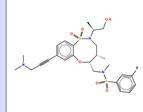
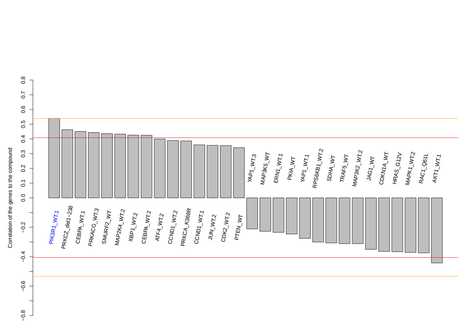
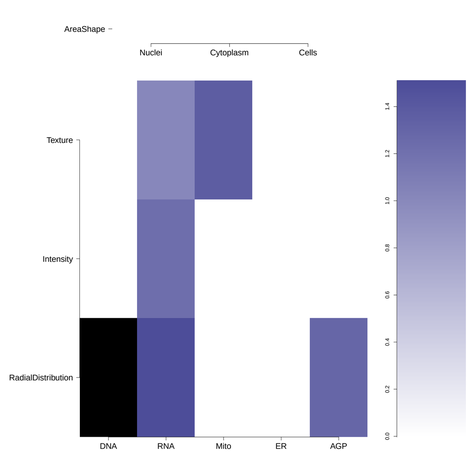
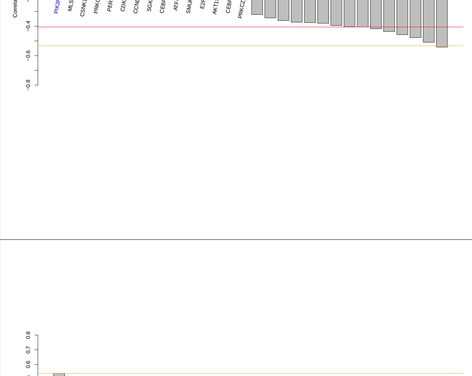
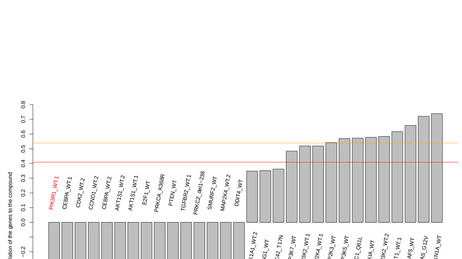
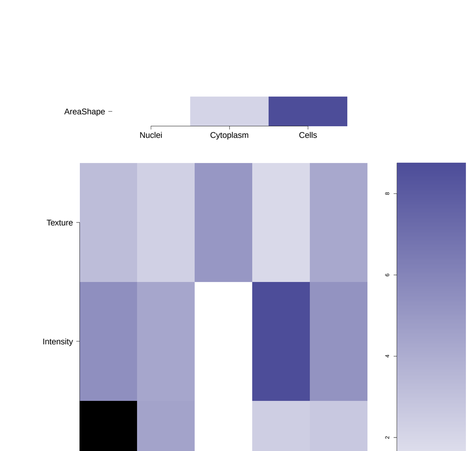
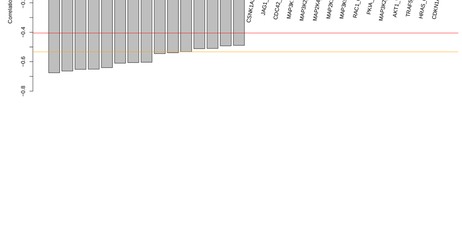
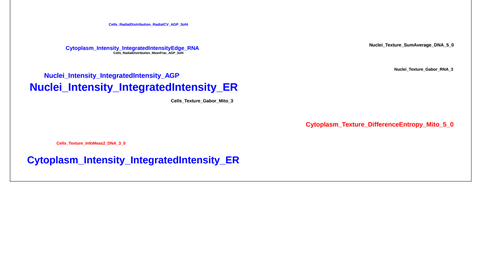

Which individual morphological features are distinguishing in the gene relative to the untreated samples? Blue/Red means the feature has a positive/negative z-score. Size is proportional to the z-score value.




| Empty | PIK3R1_WT.1 (41744) | PIK3R1_WT.1 (41755) | PIK3R1_WT.1 (41756) | PIK3R1_WT.1 (41757) | PIK3R1_WT.1 (41754) |
|---|---|---|---|---|---|
| RNA |  | | | | |
| DNA |  | | | | |

| Compound IDs and common names (where available); blue/red colored box means the matching compound is positively/negatively correlated with the cluster | Chemical structure | Mean pairwise replicates correlation of the compound signature (95th DMSO replicate correlation is 0.52) | Correlation between compound the gene | Compound rank when scored against the gene using L1000 profiling | How similar is the compound signature to the genes in this experiment? (Yellow and red lines correspond to top/bottom 1st and 5th percentile DMSO correlation to all the genes) | Common distinguishing feature categories in the compound and the gene relative to the untreated samples | Distinguishing individual features for the compound relative to untreated samples. Black means a mismatch; i.e. active (= high z-score in magnitude) in the compound, and either inactive (= small z-score in magnitude) or oppositely active in the gene | Number of PubChem assays in which the compound was tested; assays in which the compound was active are itemized |
|---|---|---|---|---|---|---|---|---|

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BRD-K42302256-001-05-5<br>ST066562<br>AC1LJLFJ<br>MLS000063378<br>HMS2326M19<br>ZINC618070<br>STK126946<br>BAS 06743063<br>SMR000075100<br>PubChem CID : 976041 |  | NA (in 1 replicates) | 0.70 | NA |  |  |  | Total number of assays tested in: 777. Active in the following assays:<br>• qHTS Assay for Inhibitors of HADH2 (Hydroxyacyl-Coenzyme A Dehydrogenase, Type II) (AID 886)<br>• qHTS Assay for Inhibitors of Bacillus subtilis Sfp phosphopantetheinyl transferase (PPTase) (AID 1490)<br>• A qHTS for Small Molecule Inhibitors of Shiga Toxin (AID 2315) |
| BRD-K23946230-001-07-9<br>MLS000771305<br>SMR000344440<br>AC1NIKDQ<br>BDBM72613<br>HMS2772C18<br>PubChem CID : 4832471 |  | NA (in 1 replicates) | 0.62 | NA |  |  |  | Total number of assays tested in: 572. Active in the following assays:<br>• HCS to Identify Inhibitors of Dynein Mediated Cargo Transport on Microtubules. (AID 1381)<br>• qHTS Assay for Inhibitors of Bacillus subtilis Sfp phosphopantetheinyl transferase (PPTase) (AID 1490)<br>• Cycloheximide Counterscreen for Small Molecule Inhibitors of Shiga Toxin (AID 2314)<br>• A qHTS for Small Molecule Inhibitors of Shiga Toxin (AID 2315)<br>• qHTS for inhibitors of ROR gamma transcriptional activity (AID 2551)<br>• Luminescence Cell-Based Dose Retest to Identify Potentiators of Heat Shock Factor 1 (HSF1) (AID 435004)<br>• HCS to Identify Inhibitors of Dynein Mediated Cargo Transport on Microtubules: Confirmation Assay (AID 463116)<br>• HTS-Luminescent assay for inhibitors of ALR by detection of hydrogen peroxide production Measured in Biochemical System Using Plate Reader - 2036-02_Inhibitor_SinglePoint_HTS (AID 485317)<br>• qHTS Inhibitors of AmpC Beta-Lactamase (assay without detergent) (AID 485341)<br>• Heat Shock Factor-1 (HSF-1) Measured in Cell-Based System Using Plate Reader - 2038-01_Activator_SinglePoint_HTS_Activity (AID 504408)<br>• Sustained Induction of HSF-1 Measured in Cell-Based System Using Plate Reader - 2038-07_Activator_Dose_CherryPick_Activity (AID 602296)<br>• A quantitative high throughput screen for small molecules that induce DNA re-replication in MCF 10a normal breast cells. (AID 624296)<br>• qHTS of TDP-43 Inhibitors (AID 652104)<br>• Primary biochemical fluorescence polarization-based high throughput screening assay to identify inhibitors of protein arginine methyltransferase 1 (PRMT1) (AID 652257)<br>• qHTS for Inhibitors of human tyrosyl-DNA phosphodiesterase 1 (TDP1): qHTS in cells in absence of CPT (AID 686978)<br>• qHTS for Inhibitors of human tyrosyl-DNA phosphodiesterase 1 (TDP1): qHTS in cells in presence of CPT (AID 686979)<br>• Fluorescence polarization-based biochemical high throughput confirmation assay to identify inhibitors of protein arginine methyltransferase 1 (PRMT1) (AID 687036)<br>• MLPCN PGC1a Modulators Measured in Cell-Based System Using Plate Reader - 2139-01_Activator_Dose_CherryPick_Activity_Set6 (AID 720513)<br>• QFRET-based biochemical high throughput primary assay to identify inhibitors of human group III secreted phospholipase A2 enzyme (HGIII-sPLA2) (AID 743126)<br>• Development of Small Molecule Probes of the Histone Methyltransferase, NSD2 Measured in Biochemical System Using Plate Reader - 7053-01_Inhibitor_SinglePoint_HTS_Activity_Set2 (AID 743445) |
| BRD-K20192397-001-01-5<br>PubChem CID : 44490468 |  | 0.75 (in 4 replicates) | 0.62 | NA |  |  |  | Total number of assays tested in: 43. |
| BRD-K50700495-001-05-0<br>ZINC03217226<br>MLS000569421<br>AC1M5TOT<br>HMS1399C03<br>HMS2313L04<br>ZINC3217226<br>SMR000155025<br>T0505-7968<br>PubChem CID : 2335893 |  | NA (in 1 replicates) | 0.59 | NA |  |  |  | Total number of assays tested in: 696. Active in the following assays:<br>• High Content Assay for Compounds that inhibit the Assembly of the Perinucleolar Compartment (AID 2417)<br>• Primary cell-based high-throughput screening for identification of compounds that antagonize MrgX1 receptor signaling (AID 588676) |
| BRD-K40543019-001-01-3<br>PubChem CID : 54649000 |  | 0.65 (in 2 replicates) | 0.59 | 0.150 |  |  |  | Total number of assays tested in: 36. |
| BRD-K92682487-001-01-9<br>PubChem CID : 54619942 |  | 0.57 (in 4 replicates) | 0.56 | NA |  |  |  | Total number of assays tested in: 36. |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| BRD-K53349319-001-01-6<br>PubChem CID : 54632181 |  | 0.54 (in 4 replicates) | 0.55 | 0.724 |  |  |  | Total number of assays tested in: 36. |
| BRD-K84802956-001-01-5<br>PubChem CID : 54640360 |  | 0.73 (in 4 replicates) | 0.55 | 0.100 |  |  |  | Total number of assays tested in: 36. |
| BRD-K42136676-001-05-9<br>AC1LJ3M9<br>MLS000588280<br>HMS2542I20<br>ZINC5819375<br>STK361603<br>ZINC05819375<br>SMR000212094<br>EU-0073050<br>ST50807812<br>F1001-0013<br>PubChem CID : 916344 |  | NA (in 1 replicates) | 0.55 | NA |  |  |  | Total number of assays tested in: 654. Active in the following assays:<br>• qHTS Assay for Modulators of miRNAs and/or Inhibitors of miR-21 (AID 2289)<br>• Elucidation of physiology of non-replicating, drug-tolerant Mycobacterium tuberculosis (AID 488890)<br>• qHTS Assay for Inhibitors of Histone Lysine Methyltransferase G9a (AID 504332)<br>• Luminescence-based biochemical primary high throughput screening assay to identify inhibitors of Trypanosoma brucei methionyl tRNA synthetase (MetRS) (AID 624268)<br>• Luminescence-based biochemical high throughput confirmation assay for inhibitors of Trypanosoma brucei methionyl tRNA synthetase (MetRS) (AID 624412)<br>• Fluorescent Polarization-based biochemical high throughput orthogonal assay for inhibitors of Trypanosoma brucei methionyl tRNA synthetase (MetRS) (AID 651607)<br>• HTS for PAX8 inhibitors using PAX8 luciferase reporter gene assay in RMG-I cells Measured in Cell-Based System Using Plate Reader - 7054-01_Inhibitor_SinglePoint_HTS_Activity (AID 652154) |
| BRD-K12091863-001-01-4<br>PubChem CID : 54618535 |  | 0.58 (in 4 replicates) | 0.54 | 0.140 |  |  |  | Total number of assays tested in: 31. |
| BRD-K75977772-001-05-9<br>MLS000756489<br>NSC205913<br>AC1N1LYV<br>ZINC5580712<br>ZINC05580712<br>NSC-205913<br>SMR000528759<br>PubChem CID : 4007404 |  | NA (in 1 replicates) | -0.68 | NA |  |  |  | Total number of assays tested in: 565. Active in the following assays:<br>• MLPCN Alpha-Synuclein 5'UTR - 5'-UTR binding - activators (AID 1814)<br>• Cycloheximide Counterscreen for Small Molecule Inhibitors of Shiga Toxin (AID 2314)<br>• A qHTS for Small Molecule Inhibitors of Shiga Toxin (AID 2315)<br>• qHTS Assay for the Inhibitors of Schistosoma Mansoni Peroxiredoxins (AID 485364)<br>• qHTS Assay for Inhibitors of Histone Lysine Methyltransferase G9a (AID 504332)<br>• qHTS profiling assay for firefly luciferase inhibitor/activator using purifed enzyme and Km concentrations of substrates (counterscreen for miR-21 project) (AID 588342)<br>• qHTS of Nrf2 Activators (AID 624171)<br>• Luminescence-based cell-based primary high throughput screening assay to identify activators of the function of SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 2 (SMARCA2, BRM) (AID 652017)<br>• Luminescence-based cell-based primary high throughput screening assay to identify activators of the DAF-12 from the parasite S. stercoralis (ssDAF-12) (AID 652126)<br>• Counterscreen for activators of the function of SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 2 (SMARCA2, BRM): Luminescence-based cell-based high throughput screening assay to identify non-selective compounds using the VP16 reporter assay (AID 686939) |
| BRD-K56431031-001-05-7<br>MLS000588411<br>AC1LTTVN<br>HMS2537A04<br>ZINC1470316<br>STK810003<br>ZINC01470316<br>SMR000212182<br>ST50042501<br>T0511-7175<br>PubChem CID : 1540074 |  | 0.85 (in 4 replicates) | -0.66 | 0.276 |  |  |  | Total number of assays tested in: 662. Active in the following assays:<br>• Multiplexed high-throughput screen for small molecule regulators of Bcl-2 family protein interactions, specifically Bim-Mcl-1 (AID 1009)<br>• qHTS for Inhibitors of Tau Fibril Formation, Fluorescence Polarization (AID 1468)<br>• HTS Assay for Peg3 Promoter Inhibitors (AID 588405)<br>• uHTS identification of inhibitors of NadD in a Colorimetric assay (AID 602399)<br>• uHTS identification of small molecule activators of alpha dystroglycan glycosylation (AID 624168)<br>• A quantitative high throughput screen for small molecules that induce DNA re-replication in MCF 10a normal breast cells. (AID 624296)<br>• uHTS identification of inhibitors of cullin neddylation in a TR-FRET assay (AID 651699) |
| BRD-K73322901-001-05-4<br>SMR000160543<br>AC1OBL0L<br>MLS000545992<br>ARONIS018840<br>STK018959<br>ZINC15985781<br>PubChem CID : 6875560 |  | 0.82 (in 4 replicates) | -0.63 | NA |  |  |  | Total number of assays tested in: 654. Active in the following assays:<br>• Leishmania major promastigote HTS (AID 1063)<br>• VP16 counterscreen qHTS for inhibitors of ROR gamma transcriptional activity (AID 2546)<br>• qHTS for inhibitors of ROR gamma transcriptional activity (AID 2551)<br>• uHTS identification of small molecule inhibitors of Plasmodium falciparum Glucose-6-phosphate dehydrogenase via a fluorescence intensity assay (AID 504690)<br>• Luminescence-based cell-based primary high throughput screening assay to identify activators of the GAA850 frataxin (FXN) promoter (AID 540364) |

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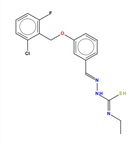
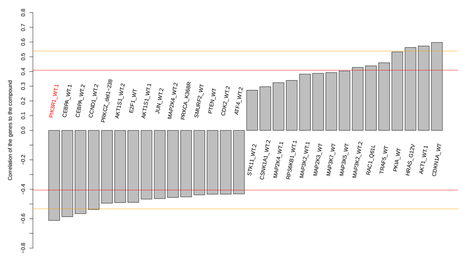
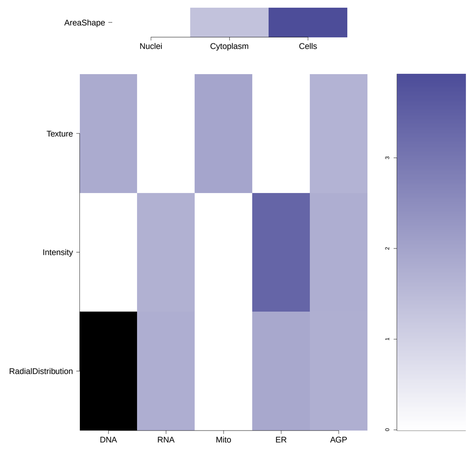
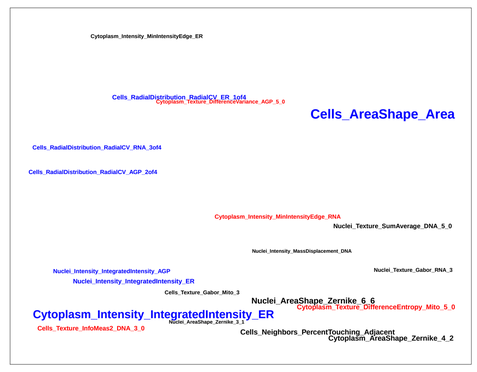
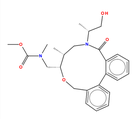
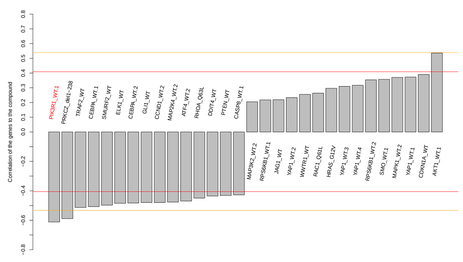
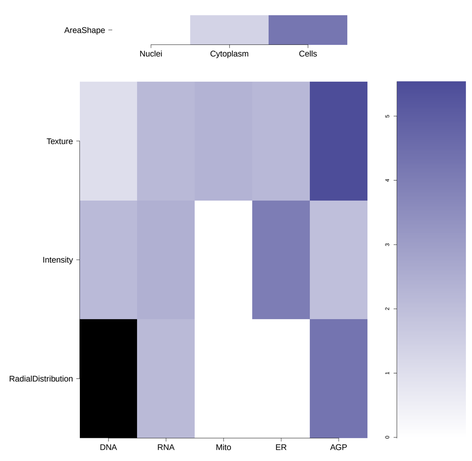
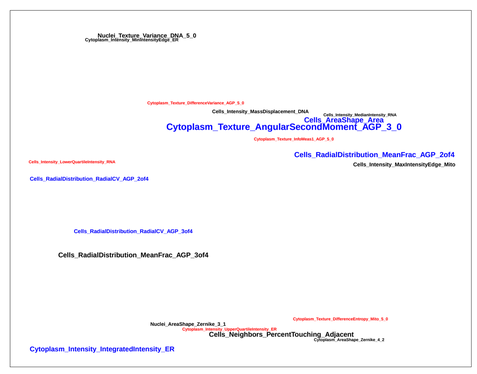
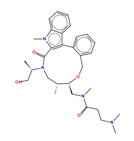
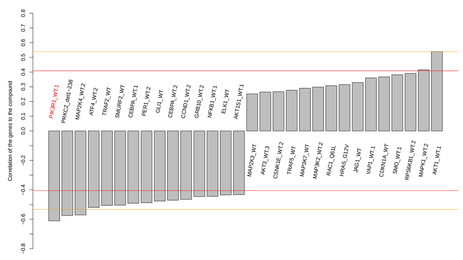
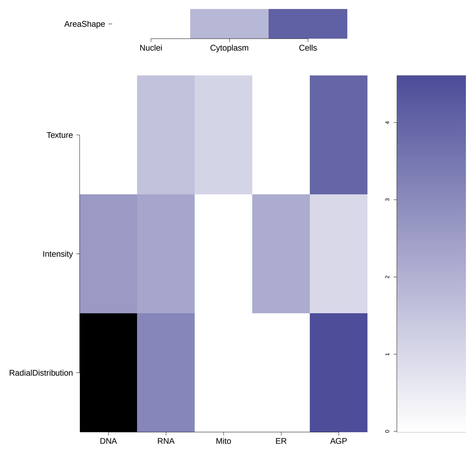
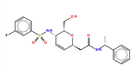
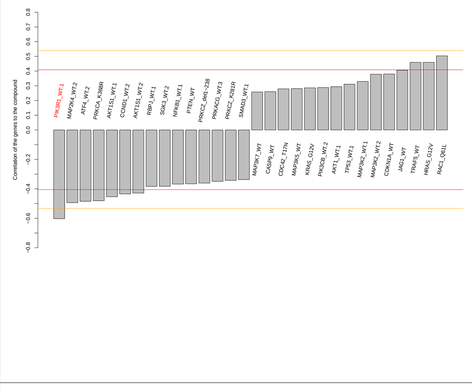
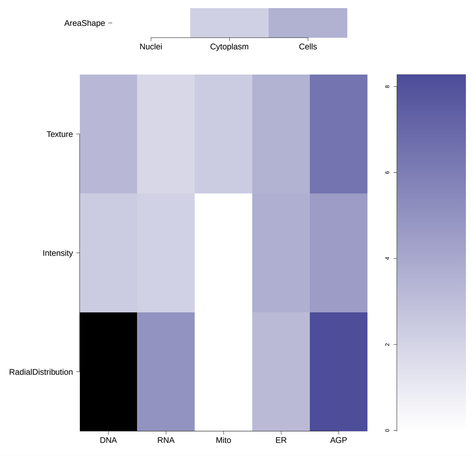
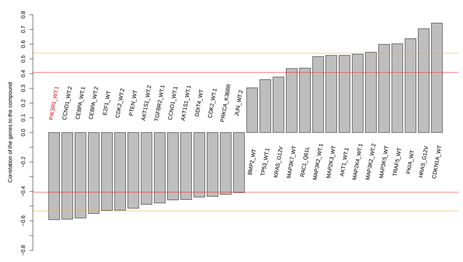
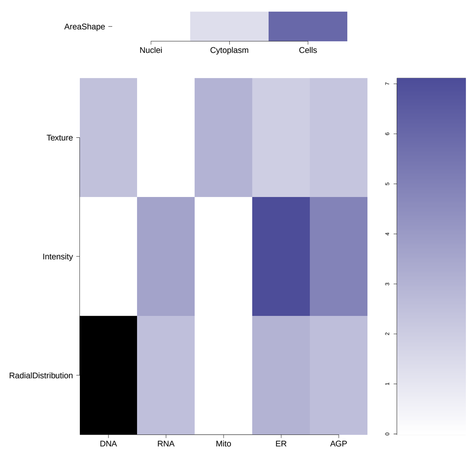
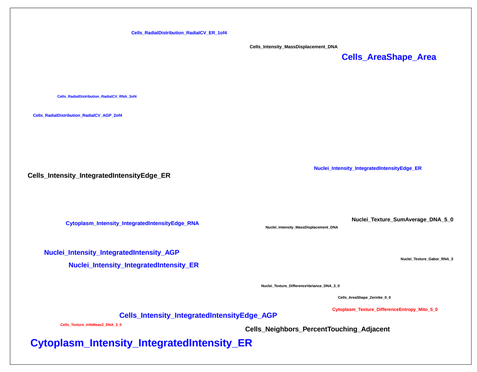
|---|---|---|---|---|---|---|---|---|
| BRD-K81217287-001-06-8<br>AC1OBKXP<br>MLS000704214<br>STL380412<br>ZINC33286712<br>SMR000228453<br>PubChem CID : 6875392 |  | 0.74 (in 4 replicates) | -0.61 | NA |  |  |  | Total number of assays tested in: 652. Active in the following assays:<br>• Chemical Genetic Screen to Identify Inhibitors of Mitochondrial Fusion - Primary Screen (AID 1362)<br>• Luminescence Cell-Based/Microorganism Primary HTS to Identify Inhibitors of T.Cruzi Replication (AID 1885)<br>• Luminescence Cell-Based/Microorganism Dose Confirmation HTS to Identify Inhibitors of T.Cruzi Replication. (AID 2044)<br>• VP16 counterscreen qHTS for inhibitors of ROR gamma transcriptional activity (AID 2546)<br>• qHTS for inhibitors of ROR gamma transcriptional activity (AID 2551)<br>• uHTS identification of small molecule inhibitors of tim10-1 yeast via a luminescent assay (AID 463190)<br>• uHTS identification of small molecule inhibitors of tim10 yeast via a luminescent assay (AID 463195)<br>• Single concentration confirmation of small molecule inhibitors of tim10-1 yeast via a luminescent assay (AID 463213)<br>• Single concentration confirmation of small molecule inhibitors of tim10 yeast via a luminescent assay (AID 463215)<br>• uHTS identification of small molecule inhibitors of Plasmodium falciparum Glucose-6-phosphate dehydrogenase via a fluorescence intensity assay (AID 504690)<br>• qHTS for Inhibitors of binding or entry into cells for Lassa Virus (AID 540256)<br>• qHTS profiling assay for firefly luciferase inhibitor/activator using purifed enzyme and Km concentrations of substrates (counterscreen for miR-21 project) (AID 588342)<br>• qHTS of GLP-1 Receptor Inverse Agonists (Inhibition Mode) (AID 624417)<br>• Fluorescence-based cell-based primary high throughput screening assay to identify antagonists of the human trace amine associated receptor 1 (TAAR1) (AID 624466)<br>• qHTS for Inhibitors of human tyrosyl-DNA phosphodiesterase 1 (TDP1): qHTS in cells in absence of CPT (AID 686978) |
| BRD-K95213130-001-01-1<br>PubChem CID : 54638094 |  | 0.80 (in 3 replicates) | -0.61 | 0.058 |  |  |  | Total number of assays tested in: 37. |
| BRD-K59324394-001-01-1<br>PubChem CID : 54638016 |  | 0.67 (in 3 replicates) | -0.61 | 0.276 |  |  |  | Total number of assays tested in: 38. Active in the following assays:<br>• FRET-based HTS for detection of RAD52 Inhibitors Measured in Biochemical System Using Plate Reader - 7018-01_Inhibitor_SinglePoint_HTS_Activity_Set2 (AID 651710) |
| BRD-K69521416-001-01-4<br>PubChem CID : 54640966 |  | 0.85 (in 4 replicates) | -0.60 | 0.276 |  |  |  | Total number of assays tested in: 41. |
| BRD-K96758498-001-05-1<br>AC1OC6NN<br>MLS000727948<br>T603E<br>STK415566<br>ZINC33287659<br>SMR000306642<br>ST016350<br>PubChem CID : 6895184 |  | 0.90 (in 4 replicates) | -0.59 | 0.264 |  |  |  | Total number of assays tested in: 620. Active in the following assays:<br>• Primary cell-based high throughput screening assay to measure STAT1 activation (AID 932)<br>• Counter Screen for Luciferase-based Primary Inhibition Assays (AID 1006)<br>• Primary Cell-based High Throughput Screening Assay for Inhibitors of Wee1 Degradation (AID 1321)<br>• qHTS Assay for Enhancers of SMN2 Splice Variant Expression (AID 1458)<br>• MLPCN Alpha-Synuclein 5'UTR - 5'-UTR binding - activators (AID 1814)<br>• Colorimetric Assay for Inhibitors for NALP1 (AID 2071)<br>• Cycloheximide Counterscreen for Small Molecule Inhibitors of Shiga Toxin (AID 2314)<br>• A qHTS for Small Molecule Inhibitors of Shiga Toxin (AID 2315)<br>• qHTS Assay for Rab9 Promoter Activators (AID 485297)<br>• qHTS Assay for NPC1 Promoter Activators (AID 485313)<br>• Luminescence-based primary cell-based high throughput screening assay to identify inhibitors of the orphan nuclear receptor subfamily 0, group B, member 1 (DAX1; NR0B1) (AID 504767)<br>• qHTS profiling assay for firefly luciferase inhibitor/activator using purifed enzyme and Km concentrations of substrates (counterscreen for miR-21 project) (AID 588342)<br>• Luminescence-based cell-based primary high throughput screening assay to identify agonists of the DAF-12 from the parasite H. glycines (hgDAF-12). (AID 687014)<br>• Counterscreen for inhibitors of 5-meCpG-binding domain protein 2 (MBD2): TRFRET-based biochemical primary high throughput screening assay to identify inhibitors of binding of ubiquitin-like with PHD and ring finger domains 1 (UHRF1) to methylated oligonucleotide (AID 687016)<br>• Wnt/Beta-catenin HTS Measured in Cell-Based System Using Plate Reader - 2161-01_Activator_SinglePoint_HTS_Activity (AID 743398) |

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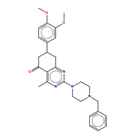
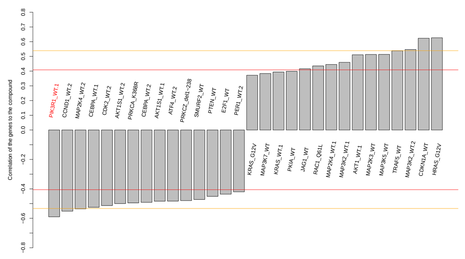
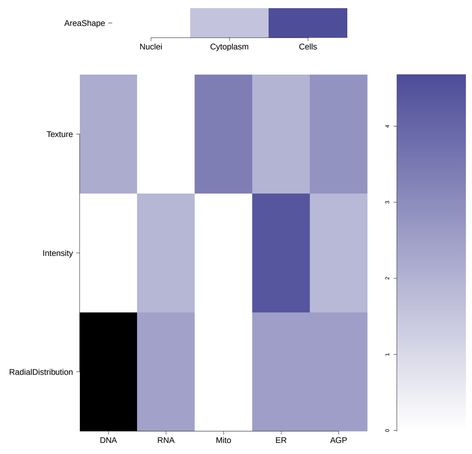
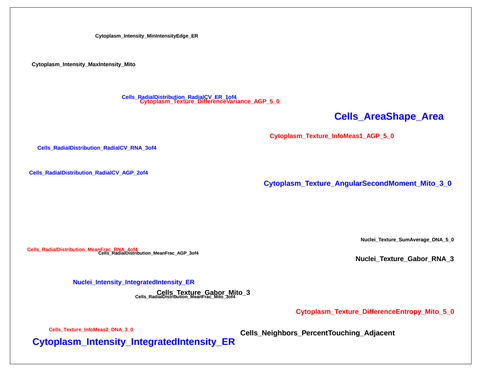
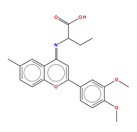
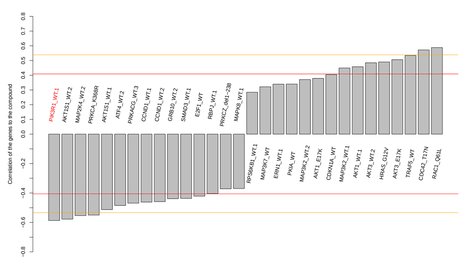
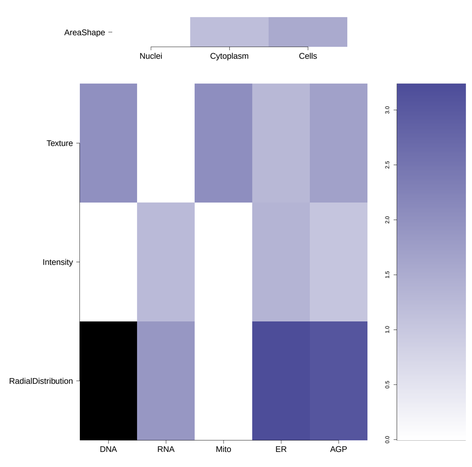
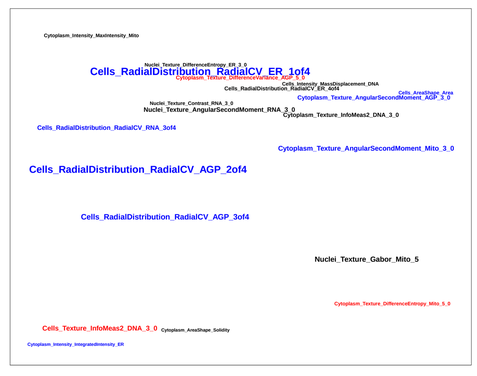
|---|---|---|---|---|---|---|---|---|
| BRD-A16346972-001-06-7<br>SMR000035856<br>AC1LDFIZ<br>MLS000039685<br>MLS002584679<br>HMS2404A08<br>STK217615<br>ST50160680<br>PubChem CID : 666227 |  | 0.65 (in 4 replicates) | -0.59 | NA |  |  |  | Total number of assays tested in: 775. Active in the following assays:<br>• CYP2C9 Assay (AID 777)<br>• CYP2C19 Assay (AID 778)<br>• qHTS Assay for Inhibitors of Aldehyde Dehydrogenase 1 (ALDH1A1) (AID 1030)<br>• Luminescence Cell-Based/Microorganism Primary HTS to Identify Inhibitors of T.Cruzi Replication (AID 1885)<br>• Luminescence Cell-Based/Microorganism Dose Confirmation HTS to Identify Inhibitors of T.Cruzi Replication. (AID 2044)<br>• qHTS Assay for Inhibitors of Histone Lysine Methyltransferase G9a (AID 504332)<br>• Nrf2 qHTS screen for inhibitors (AID 504444)<br>• Primary qHTS for delayed death inhibitors of the malarial parasite plastid, 48 hour incubation (AID 504832)<br>• Primary qHTS for delayed death inhibitors of the malarial parasite plastid, 96 hour incubation (AID 504834)<br>• qHTS for Inhibitors of binding or entry into cells for Lassa Virus (AID 540256)<br>• qHTS for inhibitors of binding or entry into cells for Marburg Virus (AID 540276)<br>• Primary cell-based high-throughput screening for identification of compounds that inhibit/block calcium-activated chloride channels (TMEM16A) (AID 588511)<br>• qHTS Assay for Inhibitors of Hepatitis C Virus (HCV) (AID 651820)<br>• Re-confirmation assay for identification of compounds that inhibit/block calcium-activated chloride channels (TMEM16A) (AID 652189)<br>• Luminescence-based cell-based primary high throughput screening assay to identify inhibitors of COUP-TFII (NR2F2) (AID 686940)<br>• qHTS for Inhibitors of human tyrosyl-DNA phosphodiesterase 1 (TDP1): qHTS in cells in absence of CPT (AID 686978)<br>• qHTS for Inhibitors of human tyrosyl-DNA phosphodiesterase 1 (TDP1): qHTS in cells in presence of CPT (AID 686979)<br>• Luminescence-based cell-based high throughput confirmation assay to identify inhibitors of COUP-TFII (NR2F2) (AID 687008)<br>• High Throughput Screening for Foot and Mouth Disease Virus Antivirals (AID 1159524) |
| BRD-A14556598-001-06-7<br>MLS000402296<br>SMR000243030<br>AC1MWISV<br>AC1Q2RLA<br>BDBM63320<br>CTK6C7395<br>NE61401<br>EN300-05982<br>T0518-2801<br>956370-25-5<br>PubChem CID : 3749969 |  | NA (in 1 replicates) | -0.59 | NA |  |  |  | Total number of assays tested in: 651. Active in the following assays:<br>• Cycloheximide Counterscreen for Small Molecule Inhibitors of Shiga Toxin (AID 2314)<br>• Confirmatory screen for compounds that activate the Choline Transporter (CHT) (AID 504833)<br>• Counter screen assay of the parental HEK293 cells for compounds that activate the Choline Transporter (CHT) (AID 623908)<br>• DENV2 CPE-Based HTS Measured in Cell-Based and Microorganism Combination System Using Plate Reader - 2149-01_Other_SinglePoint_HTS_Activity (AID 651640)<br>• Fluorescence Intensity-based biochemical primary high throughput screening assay to identify activators of kallikrein-7 (K7) zymogen (AID 652039)<br>• Fluorescence Intensity-based biochemical primary high throughput confirmation assay to identify activators of kallikrein-7 (K7) zymogen (AID 686949)<br>• Counterscreen for activators of kallikrein-7 (K7) zymogen: Fluorescence intensity-based biochemical high throughput counterscreen assay for activators that optically interfere with measurement of EDANS-DABCYL fluorescence (AID 686952) |