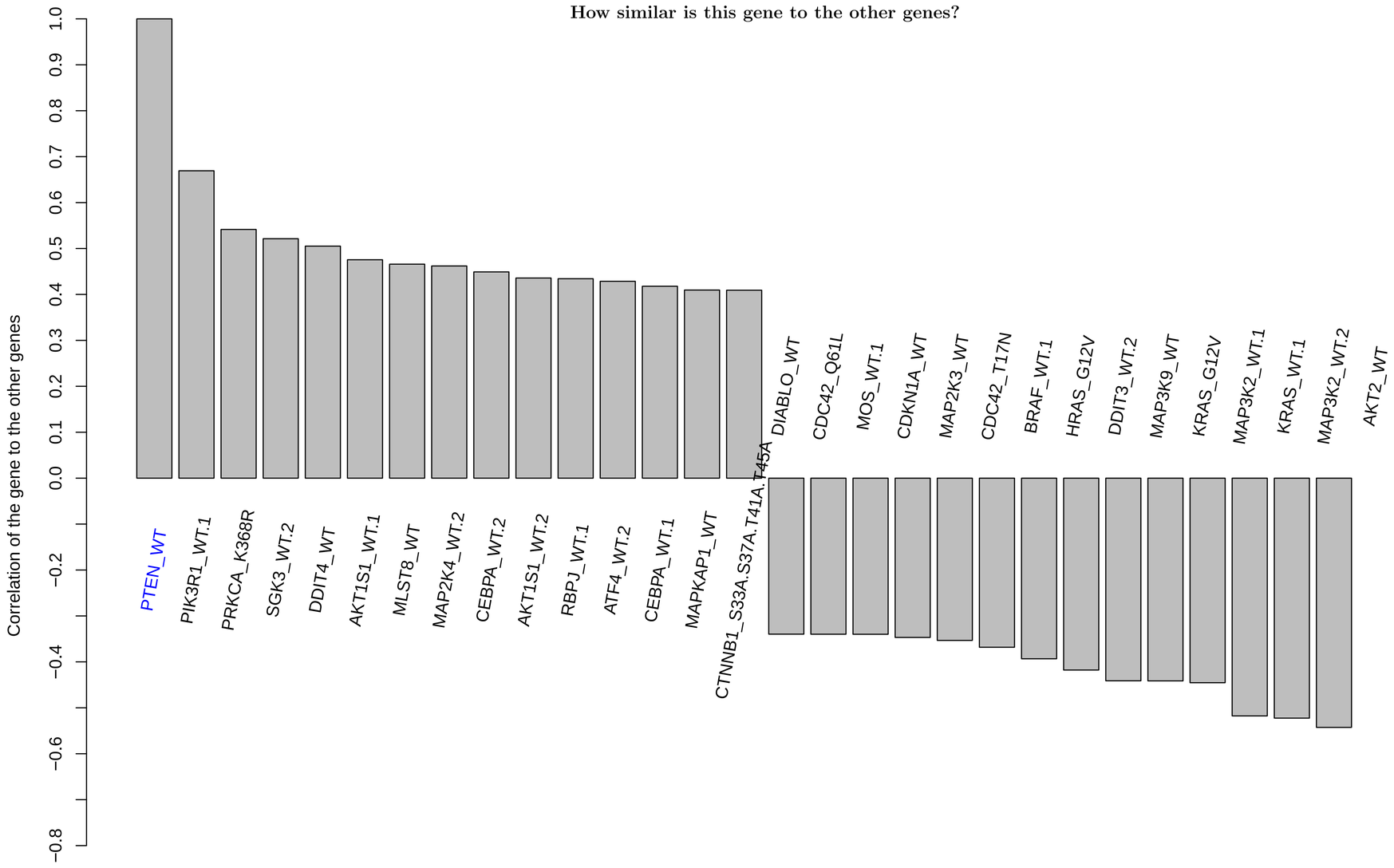
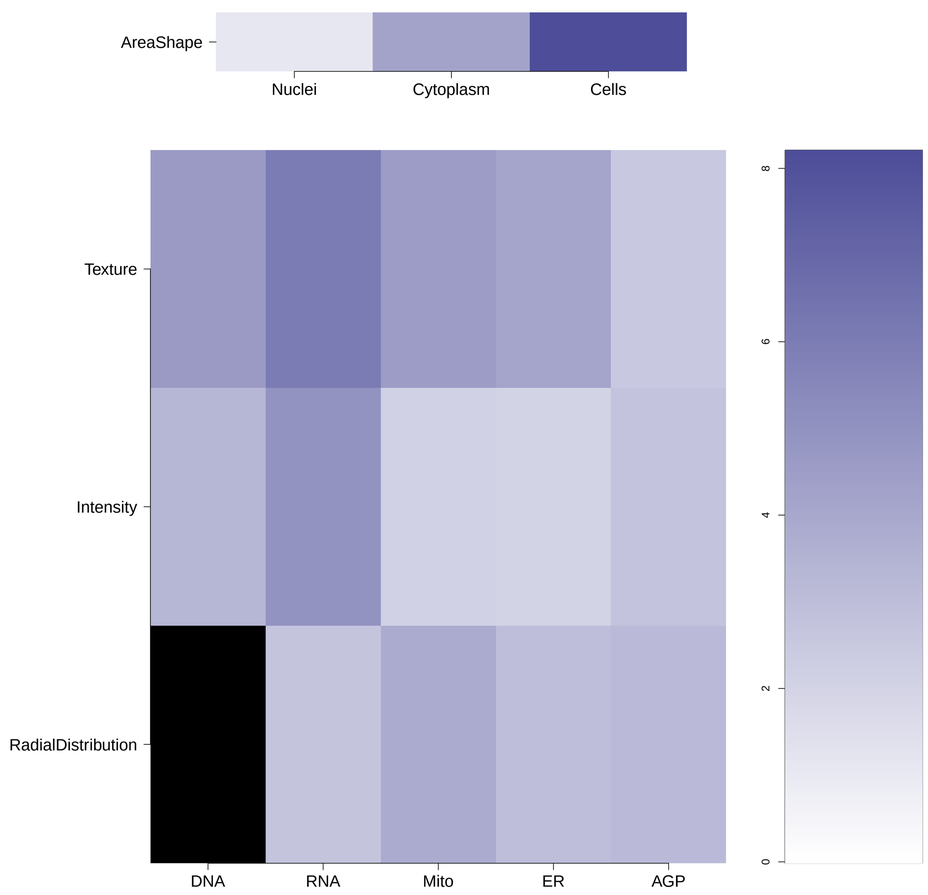
CONFIDENTIAL, contact the Imaging Platform to collaborate on the findings herein

PTEN_WT - in Canonical PI3K/AKT

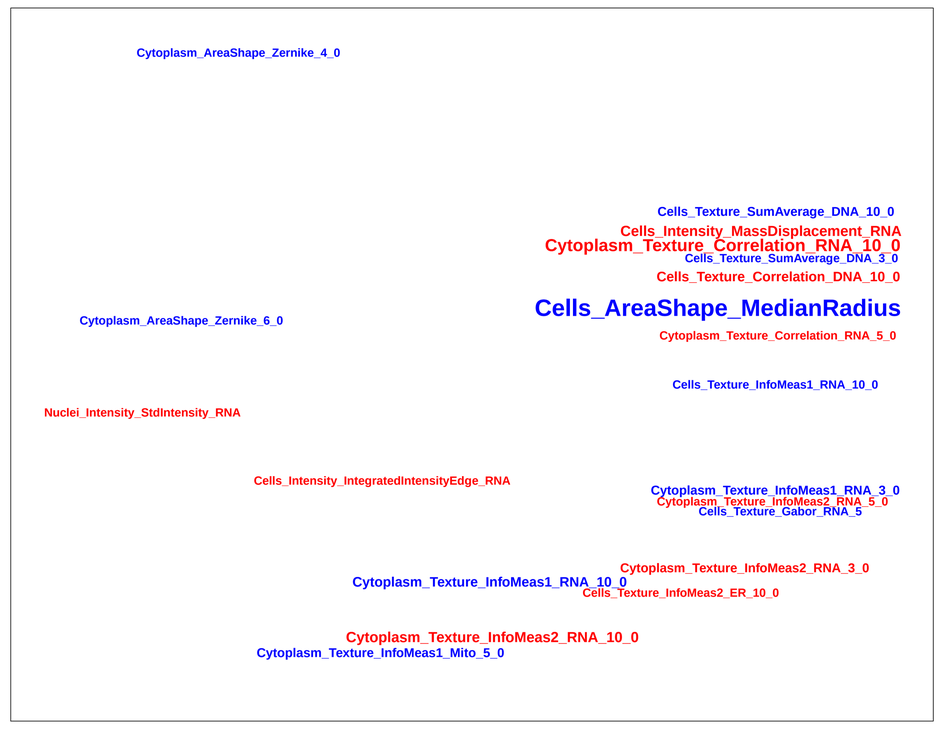
How similar is this gene to the other genes?

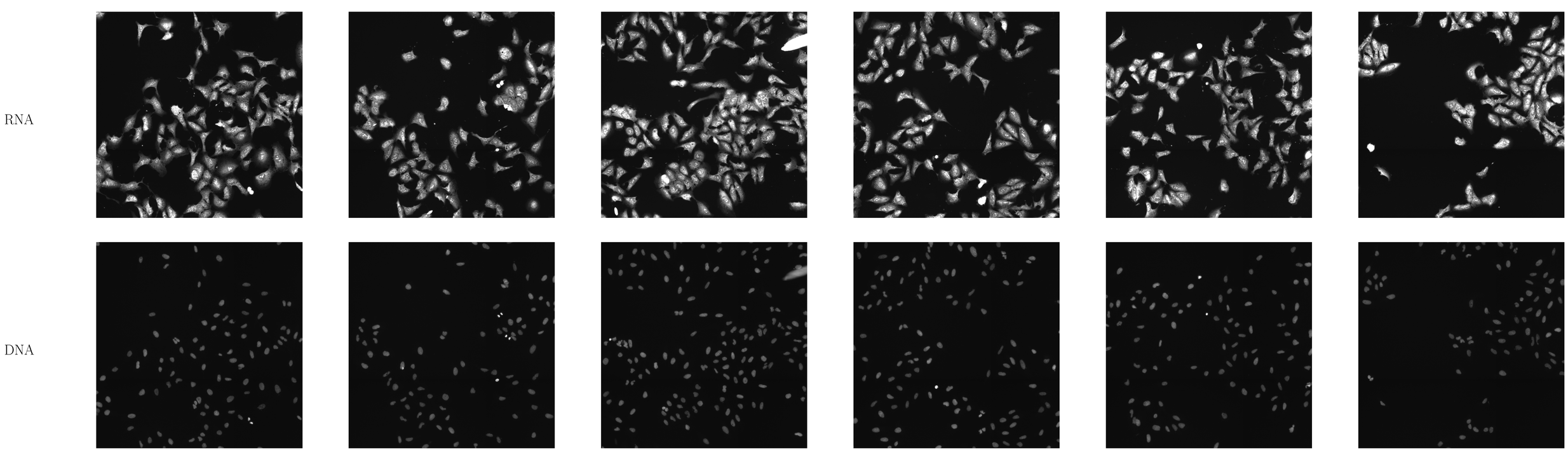


What groups of morphological features are distinguishing in the cluster relative to the untreated samples? (maximum of absolute m-score for the features belonging to the same category; m-score defined as median of a feature z-score across genes in the cluster) Black means no feature is available in the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

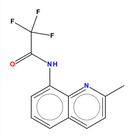
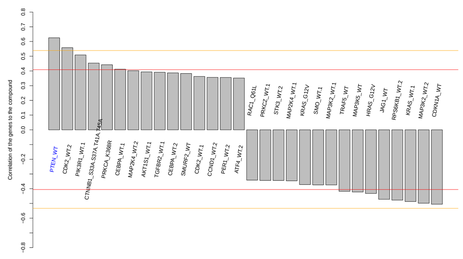
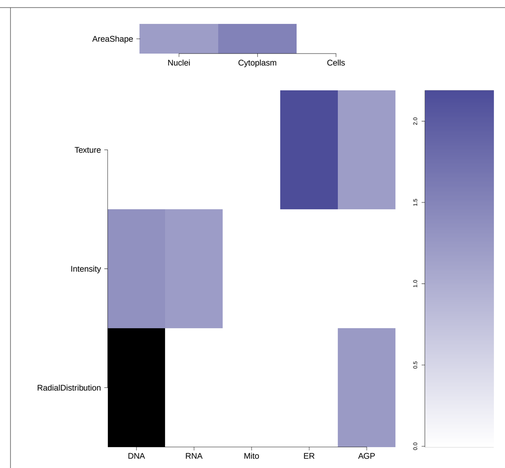
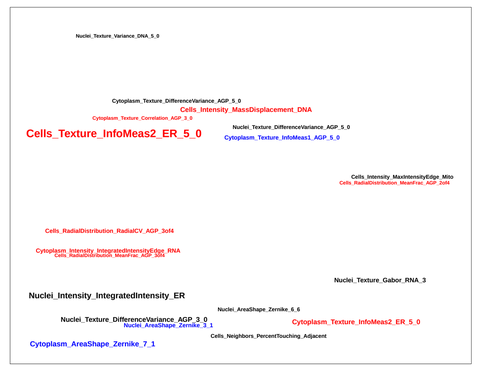
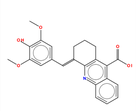
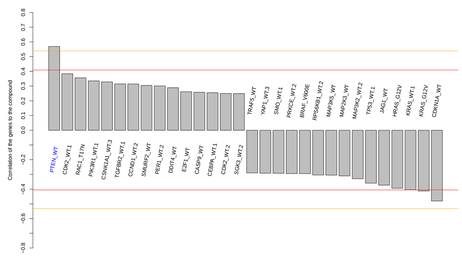
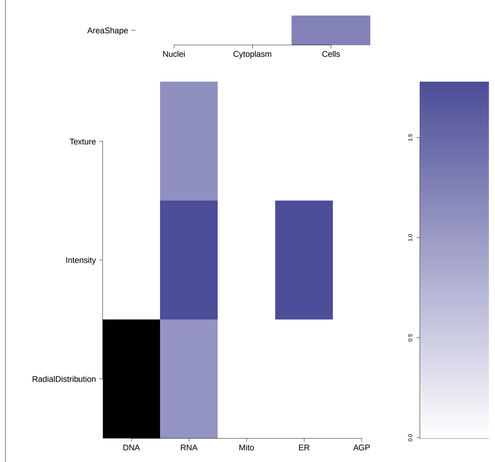
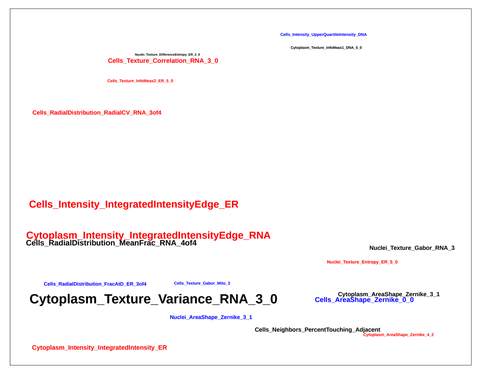
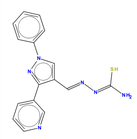
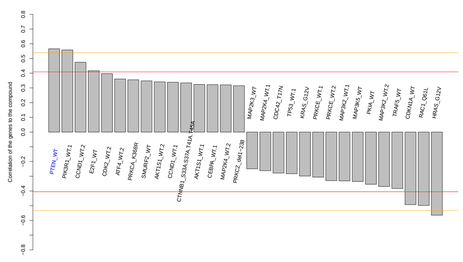
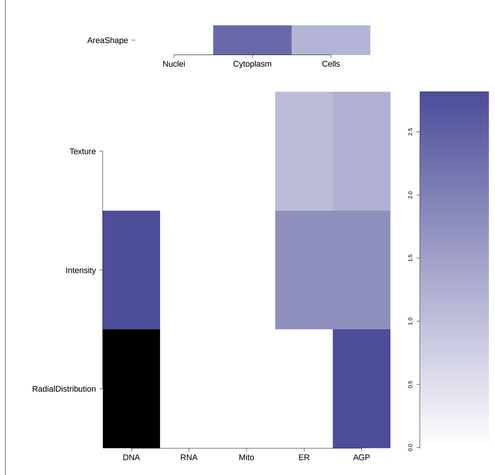
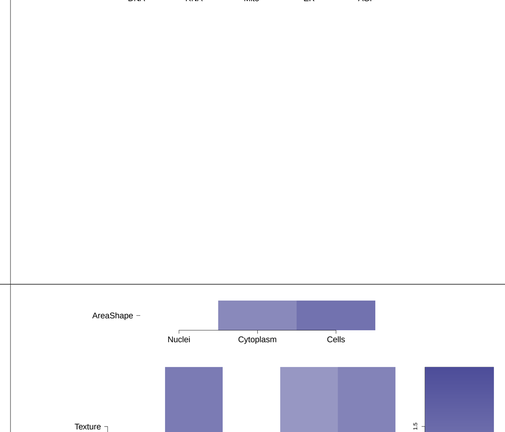
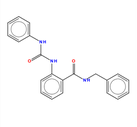
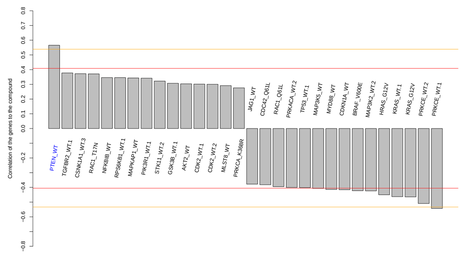
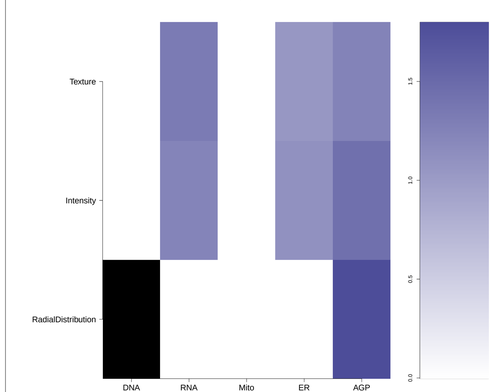


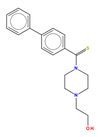
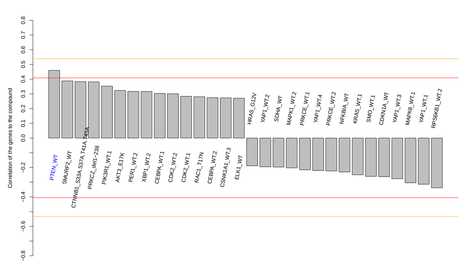
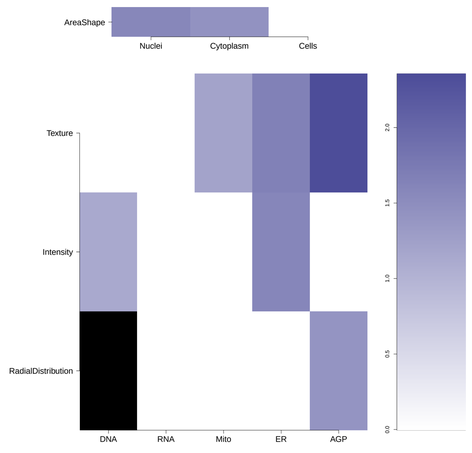
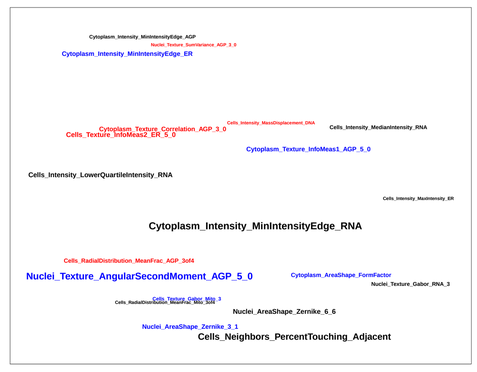
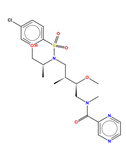
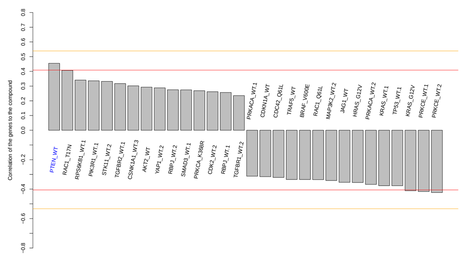
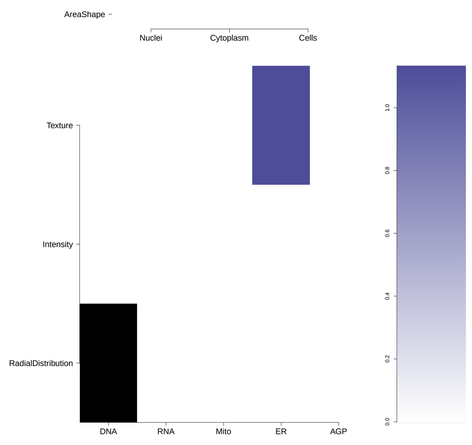
Which individual morphological features are distinguishing in the gene relative to the untreated samples? Blue/Red means the feature has a positive/negative z-score. Size is proportional to the z-score value.

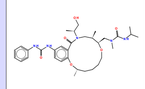
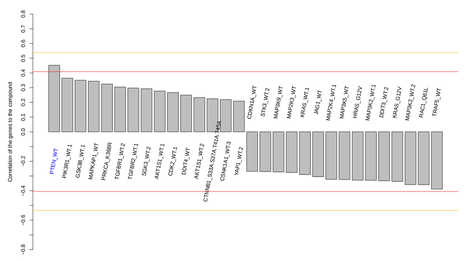
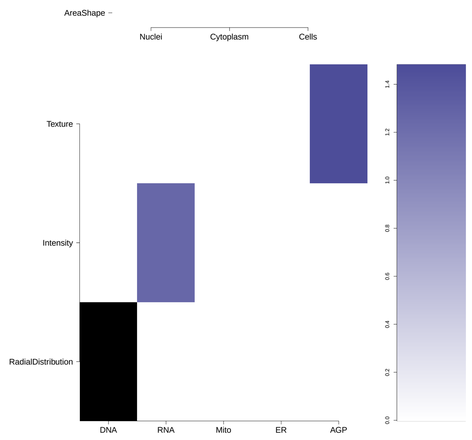
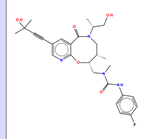
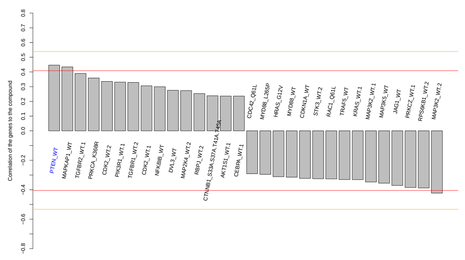
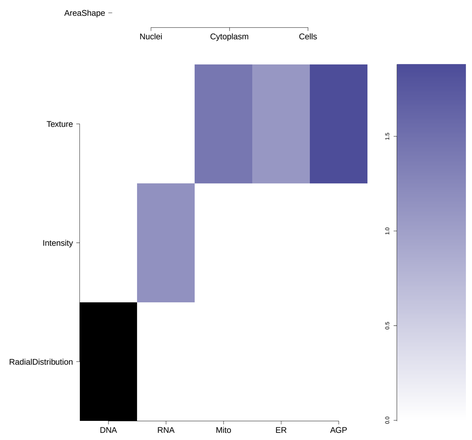
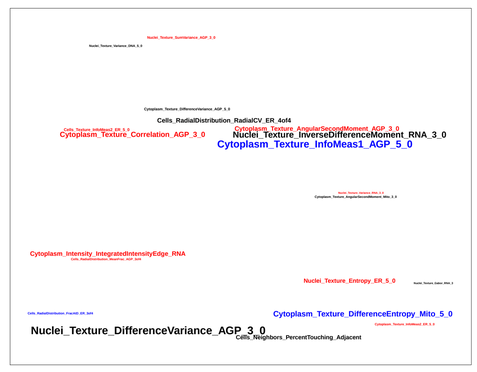
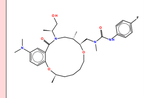
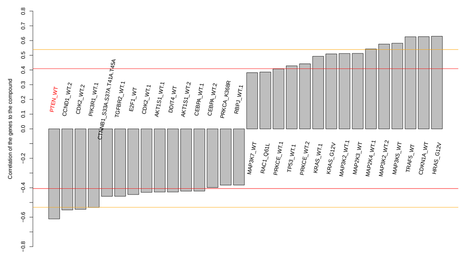
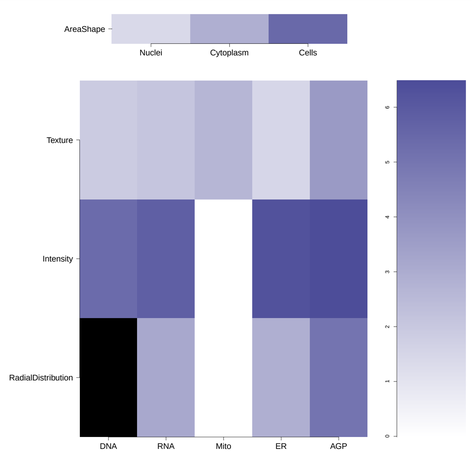
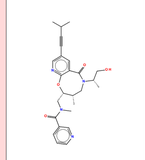
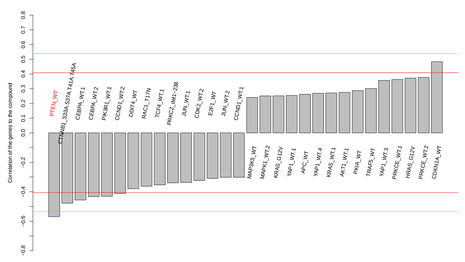
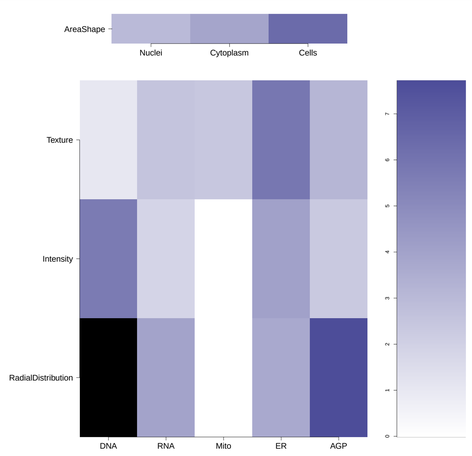
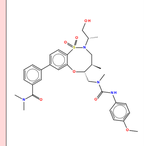
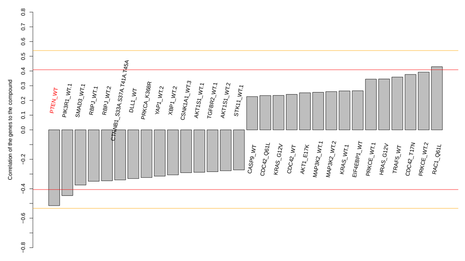
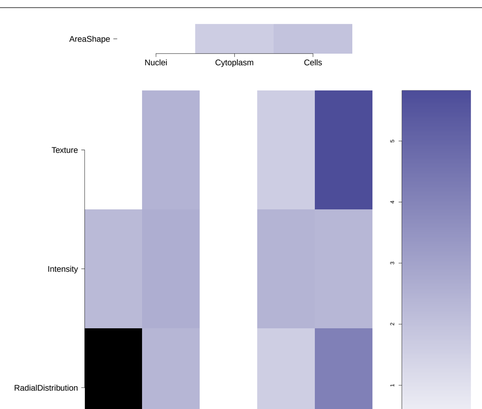


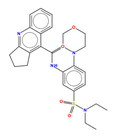
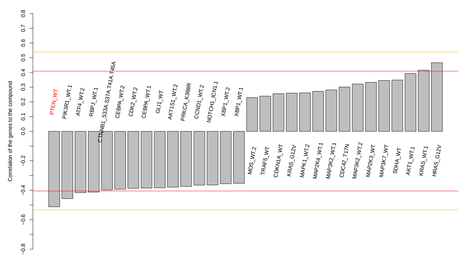
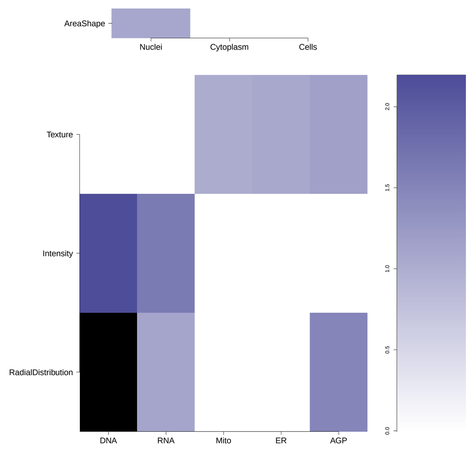
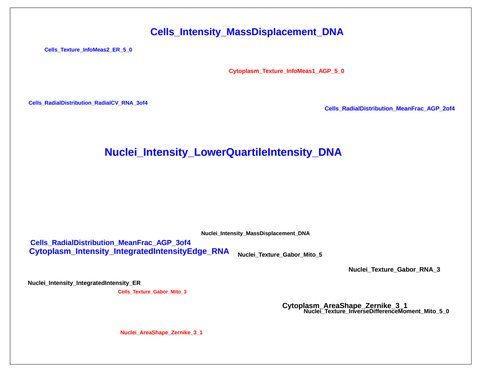
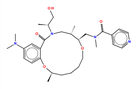
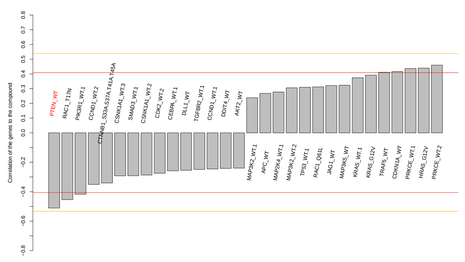
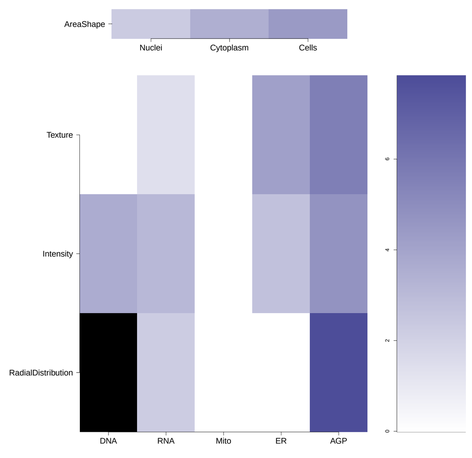
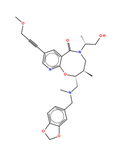
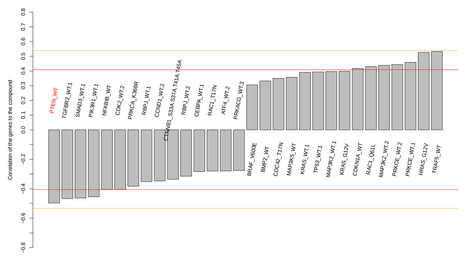
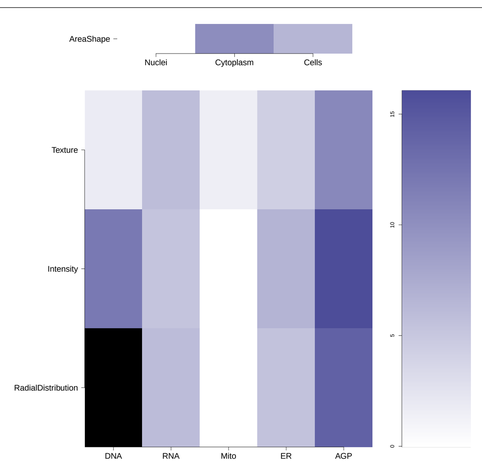
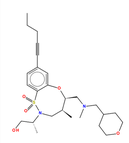
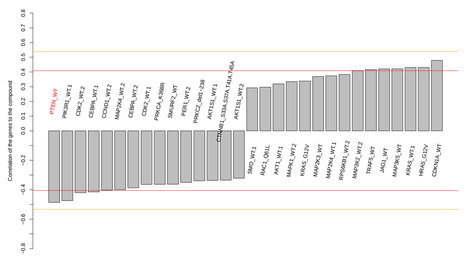
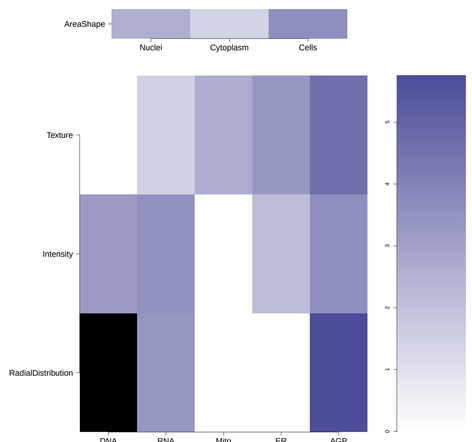
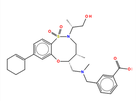
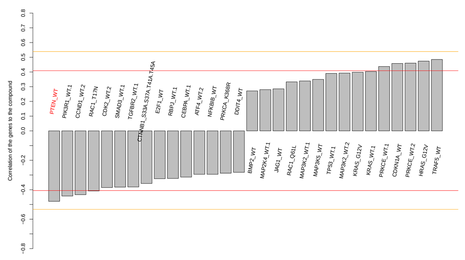
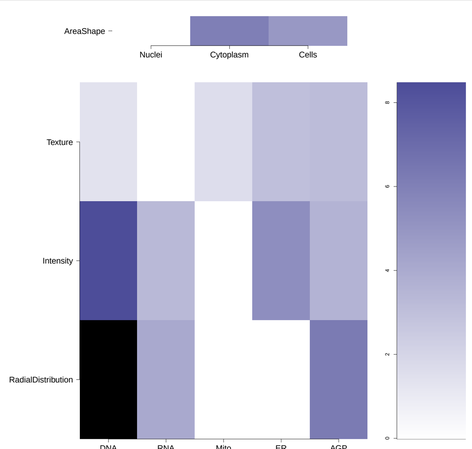
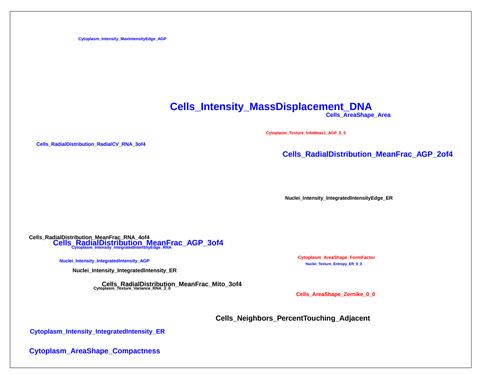


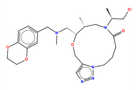
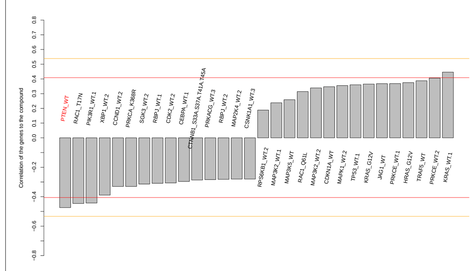
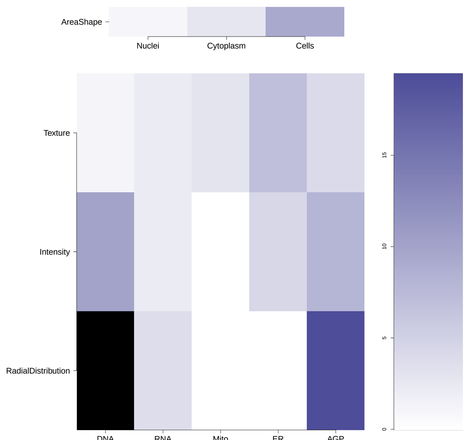
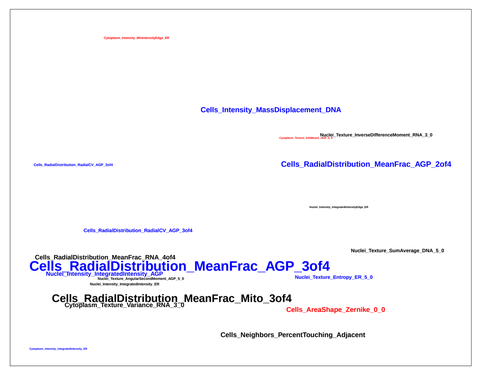
Compound IDs and common names (where available); blue/red colored box means the matching compound is positively/negatively correlated with the cluster	Chemical structure	Mean pairwise replicates correlation of the compound signature (95th DMSO replicate correlation is 0.51)	Correlation between compound 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-K28743880-001-06-0 MLS000063031 SMR000071842 F3290-0048 AC1LFG0H BDBM71799 HMS1616J19 HMS2363K03 ZINC205057 SBB040190 STK412324 ZINC00205057 ST50165194 PubChem CID : 753142		NA (in 1 replicates)	0.63	NA				Total number of assays tested in: 734. Active in the following assays: • Heat Shock Factor-1 (HSF-1) Measured in Cell-Based System Using Plate Reader - 2038-01_Activator_SinglePoint_HTS_Activity (AID 504408)
BRD-K16942891-001-06-9 T5376318 MLS000773828 AC1O30A9 HMS2743L18 ZINC6639639 ZINC96766291 SMR000364690 PubChem CID : 6212642		0.67 (in 2 replicates)	0.57	NA				Total number of assays tested in: 569. Active in the following assays: • qHTS Assay for Inhibitors of Aldehyde Dehydrogenase 1 (ALDH1A1) (AID 1030) • qHTS Assay for Inhibitors of Bacillus subtilis Sfp phosphopantetheinyl transferase (PPTase) (AID 1490) • 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) • qHTS Assay for the Inhibitors of Schistosoma Mansoni Peroxiredoxins (AID 485364) • HTS using DiI-HDL to assay lipid transfer in ldlA[SR-BI] cells Measured in Cell-Based System Using Plate Reader - 2085-01_Activator_SinglePoint_HTS_Activity (AID 504775) • qHTS Assay for the Inhibitors of Human Flap endonuclease 1 (FEN1). (AID 588795) • A quantitative high throughput screen for small molecules that induce DNA re-replication in SW480 colon adenocarcinoma cells. (AID 624297) • qHTS for Inhibitors of PLK1-PDB (polo-like kinase 1 - polo-box domain): Primary Screen (AID 720504)
BRD-K47479852-001-05-4 T0502-0158 AC1OCBLD MLS001018827 HMS1782M03 ZINC12729559 SMR000363219 PubChem CID : 6899059		NA (in 1 replicates)	0.57	NA				Total number of assays tested in: 581. Active in the following assays: • Luminescence-based primary biochemical high throughput screening assay to identify inhibitors of the Heat Shock Protein 90 (HSP90) (AID 1789) • QFRET-based counterscreen for PFM18AAP inhibitors: biochemical high throughput screening assay to identify inhibitors of the Cathepsin L proteinase (CTSL1). (AID 1906) • Cycloheximide Counterscreen for Small Molecule Inhibitors of Shiga Toxin (AID 2314) • VP16 counterscreen qHTS for inhibitors of ROR gamma transcriptional activity (AID 2546) • qHTS for inhibitors of ROR gamma transcriptional activity (AID 2551) • Inhibitors of the vitamin D receptor (VDR): qHTS (AID 504847) • Luminescence-based cell-based primary high throughput screening assay to identify activators of the GAA850 frataxin (FXN) promoter (AID 540364) • qHTS profiling assay for firefly luciferase inhibitor/activator using purifed enzyme and Km concentrations of substrates (counterscreen for miR-21 project) (AID 588342) • Counterscreen for activators of the GAA850 frataxin promoter: luminescence-based cell-based high throughput screening assay to identify activators of the GAA30 frataxin promoter (AID 588350) • Luminescence-based cell-based high throughput confirmation assay for activators of the GAA850 frataxin (FXN) promoter (AID 588351) • 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) • qHTS for Inhibitors of phosphatidylinositol 5-phosphate 4-kinase (PI5P4K) (AID 652105) • qHTS for Inhibitors of human tyrosyl-DNA phosphodiesterase 1 (TDP1): qHTS in cells in absence of CPT (AID 686978) • qHTS for Inhibitors of human tyrosyl-DNA phosphodiesterase 1 (TDP1): qHTS in cells in presence of CPT (AID 686979) • qHTS for Inhibitors of PLK1-PDB (polo-like kinase 1 - polo-box domain): Primary Screen (AID 720504)
BRD-K03678940-001-05-7 MLS000535047 SMR000142484 ZINC00472677 AC1LHZX5 BDBM76404 HMS2338G04 ZINC472677 STK862584 PubChem CID : 895604		NA (in 1 replicates)	0.57	NA				Total number of assays tested in: 688. Active in the following assays: • CYP2C9 Assay (AID 777) • Primary screen for compounds that activate Insulin promoter activity in TRM-6 cells (AID 1296) • uHTS Luminescent assay for identification of inhibitors of Sentrin-specific protease 7 (SENP7) (AID 434973) • Dose Response confirmation of inhibitors of Sentrin-specific proteases (SENPs) using a Caspase-3 Selectivity assay (AID 488901) • Dose Response confirmation of uHTS for inhibitors of Sentrin-specific protease 7 (SENP7) using a Luminescent assay (AID 488904) • Single concentration confirmation of uHTS for inhibitors of Sentrin-specific protease 7 (SENP7) using a Luminescent assay (AID 488917) • qHTS profiling assay for firefly luciferase inhibitor/activator using purifed enzyme and Km concentrations of substrates (counterscreen for miR-21 project) (AID 588342)
BRD-A85854481-001-04-5 ST50371429 SMR000093484 AC1MKS5H MLS000116514 MLS002586593 HMS2248K13 STK405939 BAS 12519801 PubChem CID : 3162345		NA (in 1 replicates)	0.48	NA				Total number of assays tested in: 772. Active in the following assays: • Human H69AR Lung Tumor Cell Growth Inhibition Assay - 86K Screen (AID 598) • CYP2C9 Assay (AID 777) • CYP2C19 Assay (AID 778) • qHTS Assay for Agonists of the Thyroid Stimulating Hormone Receptor (AID 926) • HCS assay for microtubule stabilizers (AID 2205) • Primary cell-based high-throughput screening for identification of compounds that antagonize MrgX1 receptor signaling (AID 588676) • A cell based assay for assessing vero cell cytotoxicity of Inhibitors Targeting HIV-1 Vif-dependent Degradation of Human APOBEC3G (AID 1117358)
BRD-K10894258-001-01-6 PubChem CID : 54645973		NA (in 1 replicates)	0.47	0.950				Total number of assays tested in: 41.

BRD-K72294294-001-06-9 MLS000559855 SMR000438326 AC1LI3ET BDBM81108 HMS2812N18 STK221354 ZINC19842584 PubChem CID : 848267		0.67 (in 3 replicates)	0.46	NA				Total number of assays tested in: 608. Active in the following assays: • qHTS Assay for Inhibitors of Bacillus subtilis Sfp phosphopantetheinyl transferase (PPTase) (AID 1490) • uHTS identification of compounds inhibiting the binding between the RUNX1 Runt domain and CBFb via a fluorescence resonance energy transfer (FRET) assay. (AID 1496) • uHTS absorbance assay for the identification of compounds that inhibit PHOSPHO1 (AID 1565) • MLPCN Alpha-Synuclein 5'UTR - 5'-UTR binding - inhibitors (AID 1813) • QFRET-based primary biochemical high throughput screening assay to identify inhibitors of the Plasmodium falciparum M18 Aspartyl Aminopeptidase (PFM18AAP). (AID 1822) • Luminescence Cell-Based Dose Confimation HTS to Identify Inhibitors of of 5'UTR Stem-Loop Driven Alpha-Synuclein mRNA Translation in H4 Neuroglioblastoma Cells (AID 1988) • Luminescence Cell-Based Dose Response HTS to Identify Inhibitors of 5'UTR Stem-Loop Driven Prion Protein mRNA Translation in H4 Neuroglioblastoma Cells (AID 1994) • qHTS Assay for Inhibitors of Fructose-1,6-bisphosphate Aldolase from Giardia Lamblia (AID 2451) • Confirmation qHTS Assay for Inhibitors of Bacillus subtilis Sfp phosphopantetheinyl transferase (PPTase) (AID 2701) • uHTS luminescence assay for the identification of chemical inhibitors of B-cell specific antigen receptor-induced NF-kB activation (AID 435022) • Single concentration confirmation of chemical inhibitors of B-cell specific antigen receptor-induced NF-kB activation (AID 449746) • Dose Response selectivity of uHTS chemical inhibitors of B-cell specific antigen receptor-induced NF-kB activation in Jurkat cells using a luminescence assay (AID 489006) • Dose response confirmation of uHTS of chemical inhibitors of B-cell specific antigen receptor-induced NF-kB activation in a 697B cell line using a luminescence assay (AID 489023) • qHTS Assay for Inhibitors of Histone Lysine Methyltransferase G9a (AID 504332) • Tb PFK orthogonal confirmatory assay using ATP depletion (Kinase-Glo Plus) as an alternative measure of Tb PFK activity: Hit Validation (AID 504636) • Inhibitors of T. brucei phosphofructokinase: Hit Validation (AID 504637) • uHTS identification of small molecule inhibitors of Plasmodium falciparum Glucose-6-phosphate dehydrogenase via a fluorescence intensity assay (AID 504690) • Single concentration confirmation of uHTS small molecule inhibitors of Plasmodium falciparum Glucose-6-phosphate dehydrogenase via a fluorescence intensity assay (AID 504753) • Dose Response confirmation of uHTS small molecule inhibitors of Plasmodium falciparum Glucose-6-phosphate dehydrogenase via a fluorescence intensity assay (AID 504765) • HTS Assay for Peg3 Promoter Inhibitors (AID 588405) • uHTS identification of small molecule inhibitors of Striatal-Enriched Phosphatase via a fluorescence intensity assay (AID 588621) • Luminescence-based cell-based high throughput dose response assay for inhibitors of the Steroid Receptor Coactivator 3 (SRC3; NCOA3) (AID 602166) • Counterscreen for inhibitors of the Steroid Receptor Coactivator 3 (SRC3; NCOA3): Luminescence-based cell-based high throughput dose response assay to identify inhibitors of the Steroid Receptor Coactivator 1 (SRC1; NCOA1) (AID 602168) • Counterscreen for inhibitors of the Steroid Receptor Coactivator 1 (SRC1; NCOA1): Luminescence-based cell-based high throughput dose response assay to identify inhibitors of the Steroid Receptor Coactivator 3 (SRC3; NCOA3) (AID 602234) • uHTS identification of HIF-2a Inhibitors in a luminesence assay (AID 624352) • Single concentration confirmation of uHTS identification of HIF-2a Inhibitors in a luminesence assay (AID 651580) • Single concentration confirmation of HIF-2a Inhibitors in a HIF-1a counterscreen in human MiAPaCa-2 Cells luciferase reporter assay (AID 651589) • HIV entry: Env-mediated Cell Fusion Measured in Cell-Based System Using Plate Reader - 7013-01_Inhibitor_SinglePoint_HTS_Activity (AID 651610) • Luminescence Cell-Based Primary HTS to identify inhibitors of the oncoprotein EWS/Fli transcriptional activity Measured in Cell-Based System Using Plate Reader - 7014-01_Inhibitor_SinglePoint_HTS_Activity (AID 651661) • Late stage Counterscreen for the probe development effort to identify inhibitors of the Steroid Receptor Coactivator 3 (SRC3; NCOA3): Luminescence-based cell-based dose response assay to identify inhibitors of the Steroid Receptor Coactivator 2 (SRC2; NCOA2) (AID 651782) • Late stage Counterscreen for the probe development effort to identify inhibitors of the Steroid Receptor Coactivator 3 (SRC3; NCOA3): Luminescence-based cell-based dose response assay to identify inhibitors of the Steroid Receptor Coactivator 1 (SRC1; NCOA1) (AID 651786) • Late stage assay for the probe development effort to identify inhibitors of the Steroid Receptor Coactivator 3 (SRC3; NCOA3): Luminescence-based cell-based dose response assay for SRC3 inhibitors (AID 651788) • Luminescence-based cell-based primary high throughput screening assay to identify inhibitors of the Steroid Receptor Coactivator 2 (SRC2; NCOA2) (AID 651957) • Control Cell Fusion Counterscreen Assay Measured in Cell-Based System Using Plate Reader - 7013-02_Inhibitor_Dose_CherryPick_Activity (AID 652040) • HIV entry: Env-mediated Cell Fusion Measured in Cell-Based System Using Plate Reader - 7013-01_Inhibitor_Dose_CherryPick_Activity (AID 652057) • Cell fusion assay for clade C HIV-1ZM109 Env Measured in Cell-Based System Using Plate Reader - 7013-05_Inhibitor_Dose_CherryPick_Activity (AID 652058) • HIV-1 Cell Fusion assay for clade B Env AD8 Measured in Cell-Based System Using Plate Reader - 7013-04_Inhibitor_Dose_CherryPick_Activity (AID 652062) • Primary biochemical fluorescence polarization-based high throughput screening assay to identify inhibitors of protein arginine methyltransferase 1 (PRMT1) (AID 652257) • Luminescence Cell-Based Primary HTS to identify inhibitors of the oncoprotein EWS/Fli transcriptional activity Measured in Cell-Based System Using Plate Reader - 7014-01_Inhibitor_Dose_CherryPick_Activity (AID 686920) • Fluorescence polarization-based biochemical high throughput confirmation assay to identify inhibitors of protein arginine methyltransferase 1 (PRMT1) (AID 687036) • qHTS for Inhibitors of PLK1-PDB (polo-like kinase 1 - polo-box domain): Primary Screen (AID 720504)
BRD-K05640282-001-01-0 PubChem CID : 54649122		0.53 (in 2 replicates)	0.45	0.587				Total number of assays tested in: 33.

BRD-K96157570-001-01-6 PubChem CID : 44493596		0.53 (in 4 replicates)	0.45	NA				Total number of assays tested in: 32.
BRD-K79619334-001-01-3 PubChem CID : 44506120		0.58 (in 4 replicates)	0.45	0.735				Total number of assays tested in: 44.
BRD-K87465930-001-01-9 PubChem CID : 44620463		0.87 (in 4 replicates)	-0.61	0.982				Total number of assays tested in: 22.
BRD-K35231228-001-01-9 PubChem CID : 54618837		0.87 (in 3 replicates)	-0.57	0.821				Total number of assays tested in: 37.
BRD-K53985154-001-01-5 PubChem CID : 54618512		0.73 (in 4 replicates)	-0.51	0.747				Total number of assays tested in: 37.

BRD-K18367191-001-05-6 MLS000409344 SMR000247607 T5294282 AC1NIISZ MLS002635448 BDBM50318 HMS2514J21 ZINC8687932 ZINC08687932 PubChem CID : 4831734		NA (in 1 replicates)	-0.51	NA				Total number of assays tested in: 651. Active in the following assays: • uHTS of Mcl-1/Noxa interaction inhibitors (AID 1022) • qHTS Assay for Inhibitors of Aldehyde Dehydrogenase 1 (ALDH1A1) (AID 1030) • Dose Response Confirmation for Mcl-1/Noxa Interaction Inhibitors (AID 1417) • TR-FRET-based primary biochemical high-throughput screening assay to identify inhibitors of Hepatitis C Virus (HCV) core protein dimerization (AID 1899) • uHTS identification of small molecules that induce b-cell replication in the MIN-6 cell line (AID 2380) • qHTS Assay for Inhibitors of RecQ-Like Dna Helicase 1 (RECQ1) (AID 2549) • Fluorescence polarization-based primary biochemical high throughput screening assay to identify inhibitors of the plasma platelet activating factor acetylhydrolase (pPAFAH) (AID 463082) • qHTS Assay for Inhibitors of DNA Polymerase Beta (AID 485314) • qHTS Assay for the Inhibitors of L3MBTL1 (AID 485360) • uHTS Colorimetric assay for identification of inhibitors of Scp-1 (AID 493091) • qHTS screen for small molecules that inhibit ELG1-dependent DNA repair in human embryonic kidney (HEK293T) cells expressing luciferase-tagged ELG1 (AID 504467) • Primary qHTS for delayed death inhibitors of the malarial parasite plastid, 48 hour incubation (AID 504832) • Primary qHTS for delayed death inhibitors of the malarial parasite plastid, 96 hour incubation (AID 504834) • qHTS Assay for the Inhibitors of L3MBTL1: Hit Validation (AID 540279) • Inhibitors of DNA Polymerase Beta: Hit validation (AID 540280) • Single concentration confirmation of uHTS hits for Scp-1 phosphatase using a colorimetric assay (AID 540281) • Inhibitors of DNA Polymerase Beta: Hit Validation in Radiolabeled Extension Assay (AID 540325) • uHTS identification of DNMT1 inhibitors in a Fluorescent Molecular Beacon assay (AID 588458) • qHTS for Inhibitors of Polymerase Iota (AID 588590) • qHTS for Inhibitors of Polymerase Eta (AID 588591) • Fluorescence-based cell-based primary high throughput screening assay to identify antagonists of the human trace amine associated receptor 1 (TAAR1) (AID 624466) • qHTS for Inhibitors of phosphatidylinositol 5-phosphate 4-kinase (PI5P4K) (AID 652105) • qHTS for Inhibitors of human tyrosyl-DNA phosphodiesterase 1 (TDP1): qHTS in cells in absence of CPT (AID 686978) • qHTS for Inhibitors of human tyrosyl-DNA phosphodiesterase 1 (TDP1): qHTS in cells in presence of CPT (AID 686979) • Fluorescence polarization-based biochemical high throughput primary assay to identify inhibitors of alpha/beta hydrolase domain containing 4 (ABHD4). (AID 720543) • Fluorescence polarization-based biochemical high throughput confirmation assay to identify inhibitors of alpha/beta hydrolase domain containing 4 (ABHD4). (AID 720658)
BRD-K28531276-001-01-2 PubChem CID : 44485129		0.78 (in 4 replicates)	-0.51	0.675				Total number of assays tested in: 31.
BRD-K52872067-001-01-2 PubChem CID : 54619127		0.86 (in 4 replicates)	-0.50	0.678				Total number of assays tested in: 40.
BRD-K66573697-001-01-8 PubChem CID : 54618144		0.57 (in 4 replicates)	-0.49	0.971				Total number of assays tested in: 35.
BRD-K70018966-001-01-2 PubChem CID : 54618727		0.66 (in 3 replicates)	-0.48	0.162				Total number of assays tested in: 35.

BRD-K29285912-001-01-4 PubChem CID : 44497256		NA (in 1 replicates)	-0.47	0.373				Total number of assays tested in: 47.
BRD-K78218619-001-01-1 PubChem CID : 54618157		0.62 (in 4 replicates)	-0.47	0.413				Total number of assays tested in: 43. Active in the following assays: • Small molecule inhibitors of miR122 Measured in Cell-Based System Using Plate Reader - 2144-01_Inhibitor_SinglePoint_HTS_Activity (AID 602342) • HTS for the detection of C. neoformans cell lysis via adenylate kinase (AK) release Measured in Microorganism System Using Plate Reader - 2162-01_Inhibitor_SinglePoint_HTS_Activity (AID 651654) • Small molecule inhibitors of miR122 Measured in Cell-Based System Using Plate Reader - 2144-01_Inhibitor_Dose_CherryPick_Activity (AID 652053)