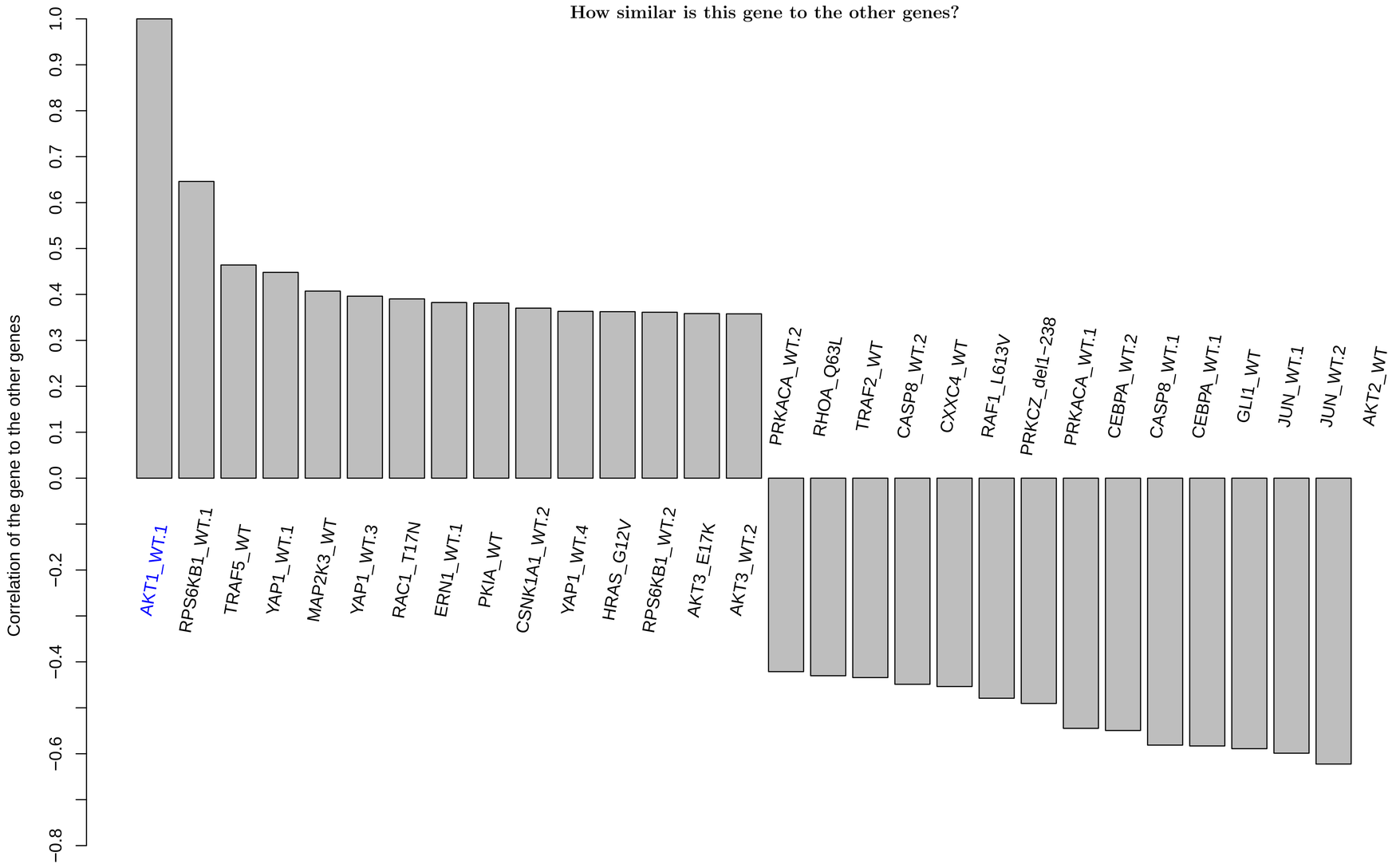
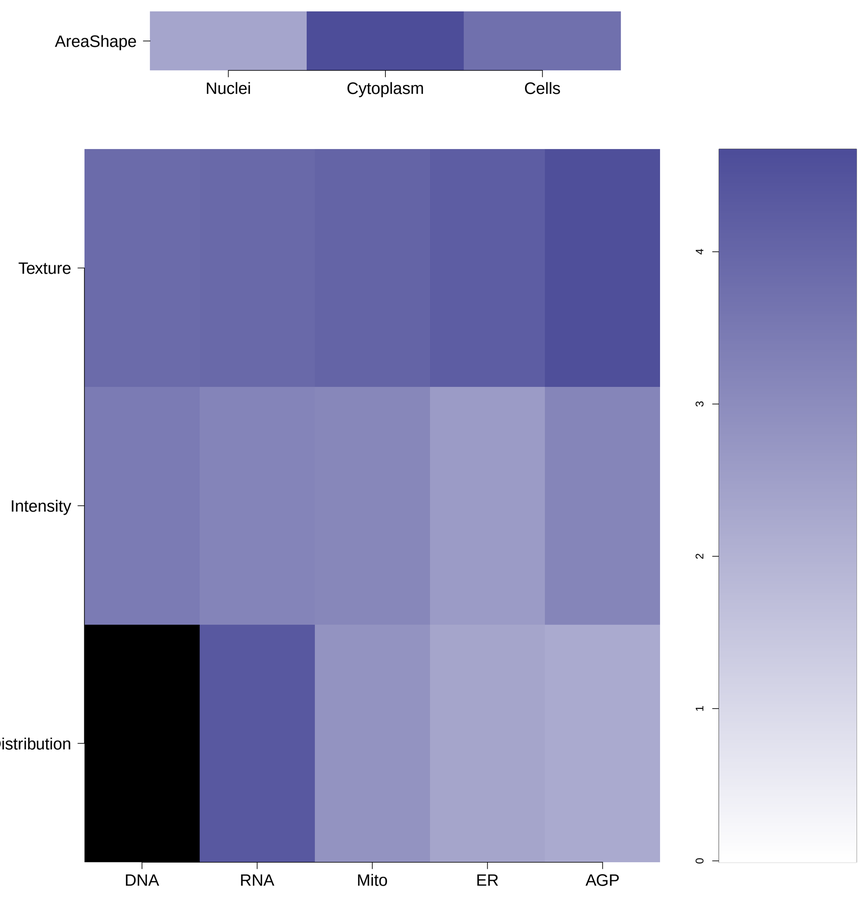
AKT1_WT.1 - in Canonical PI3K/AKT

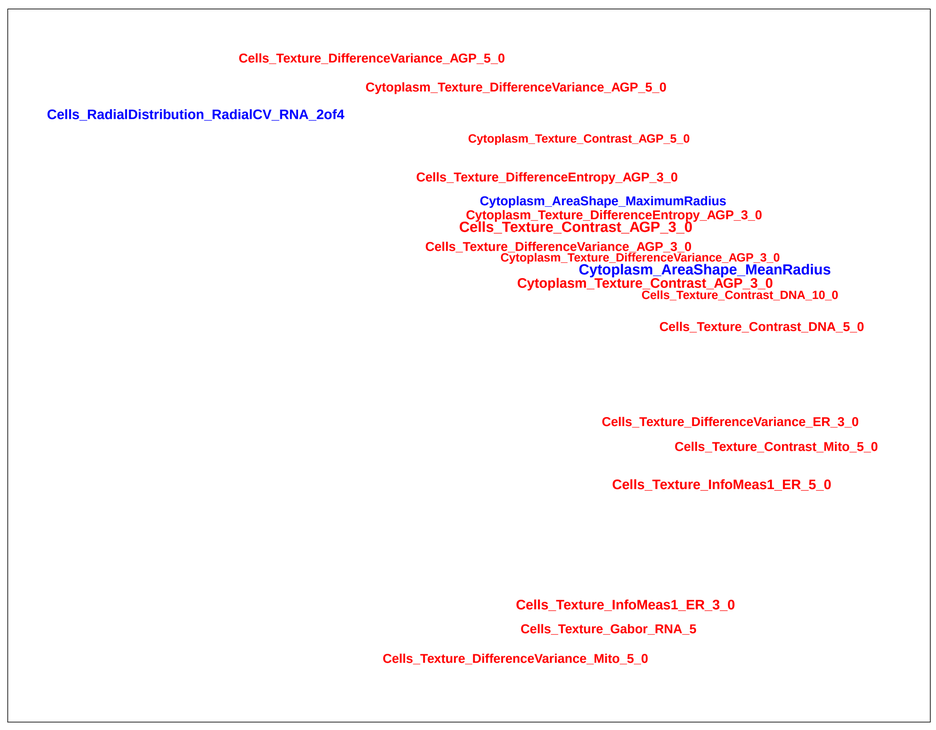
How similar is this gene to the other genes?

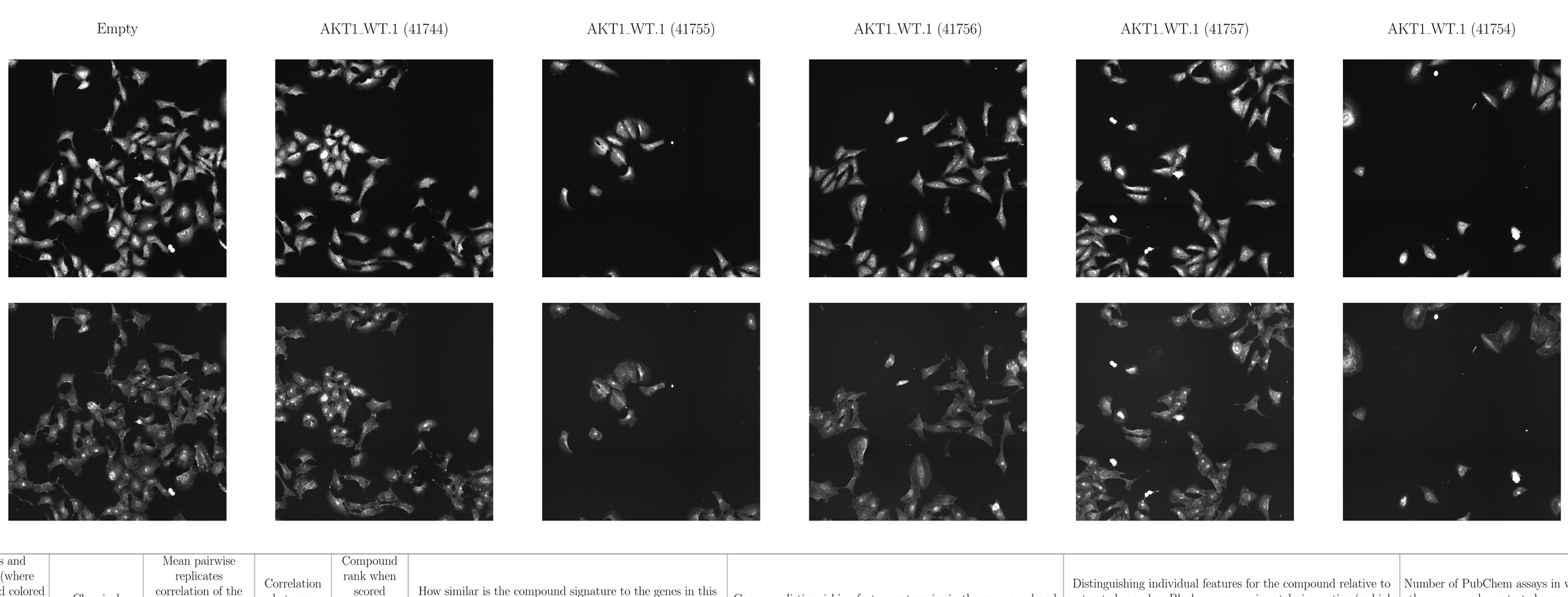


What groups of morphological features are distinguishing in the cluster relative to the untreated samples? (maximum of absolute m-score for the features belonging to the same category; m-score defined as median of a feature z-score across genes in the cluster) Black means no feature is available in the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

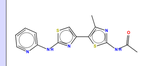
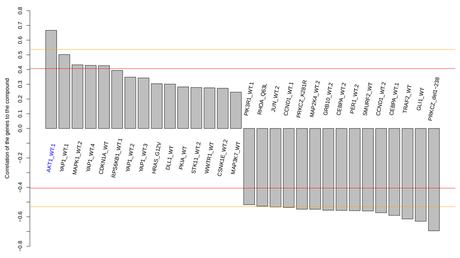
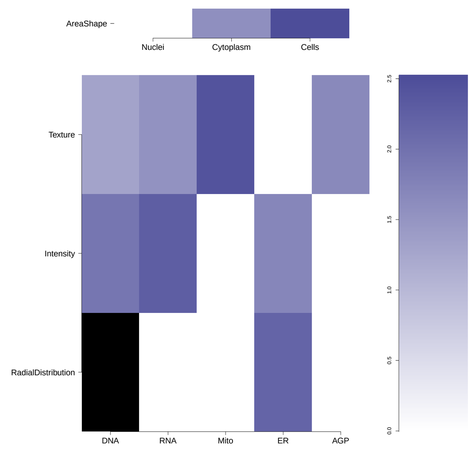
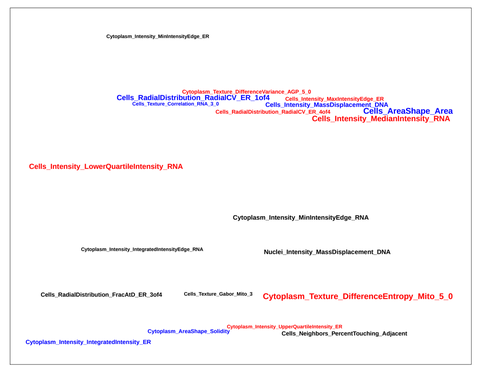
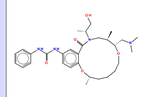
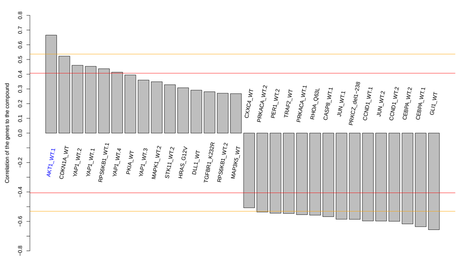
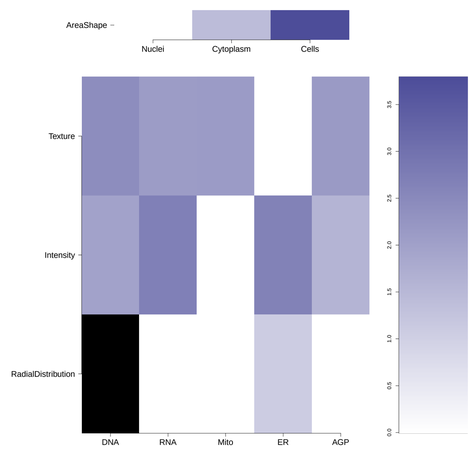
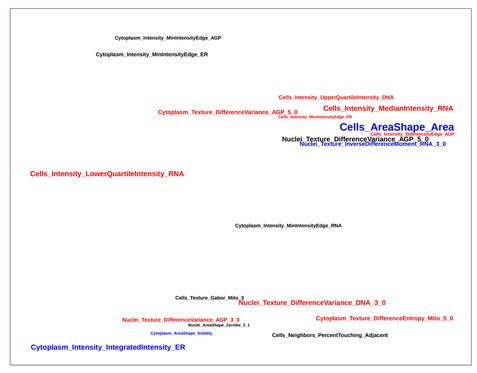
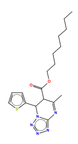
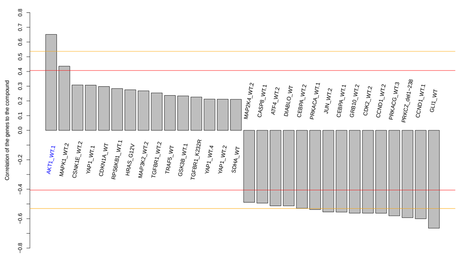
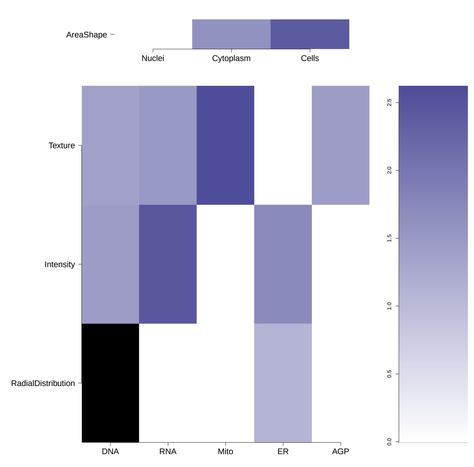
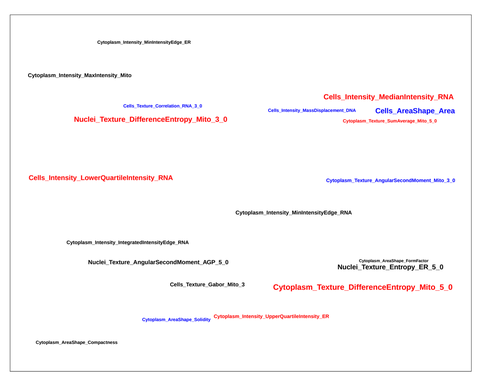


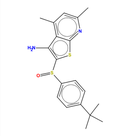
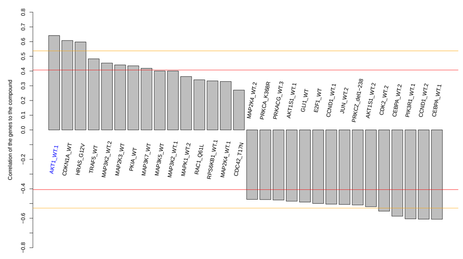
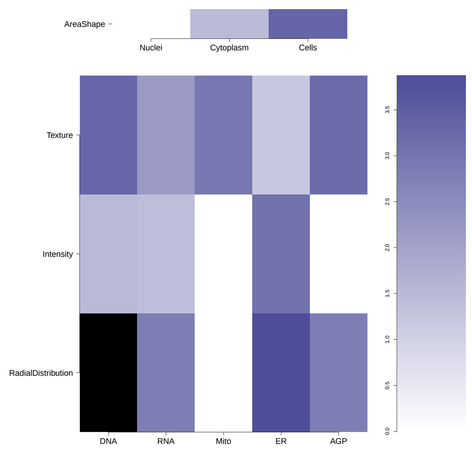
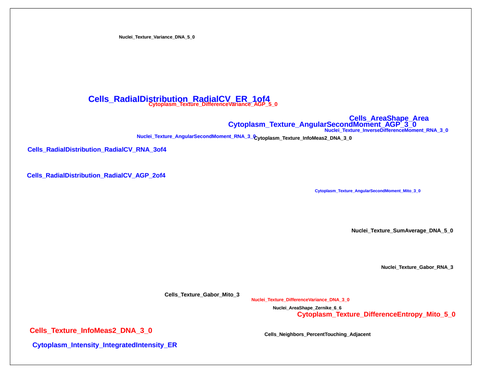
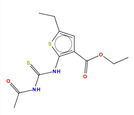
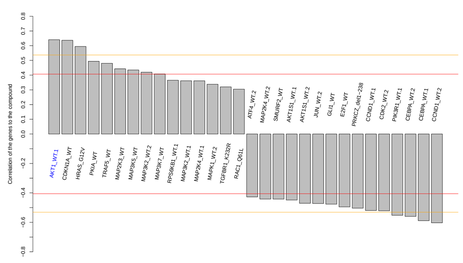
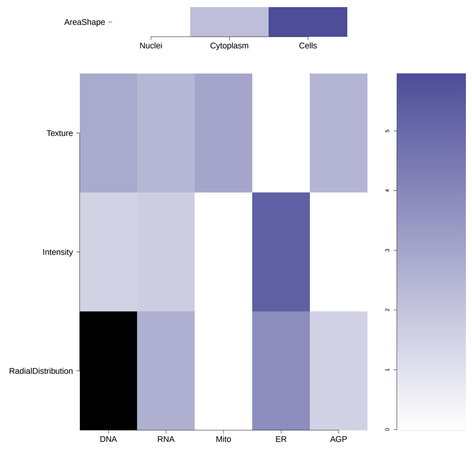
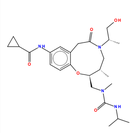
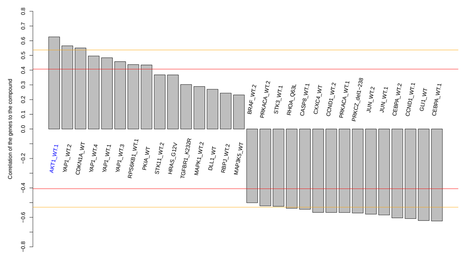
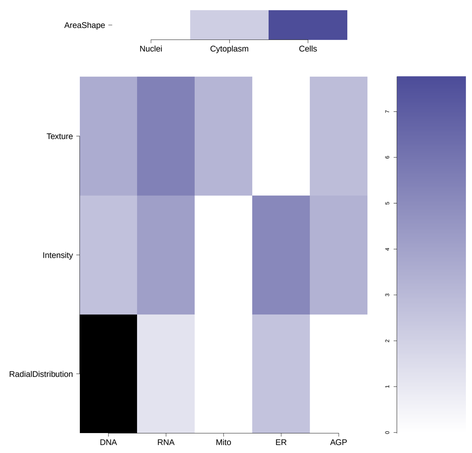
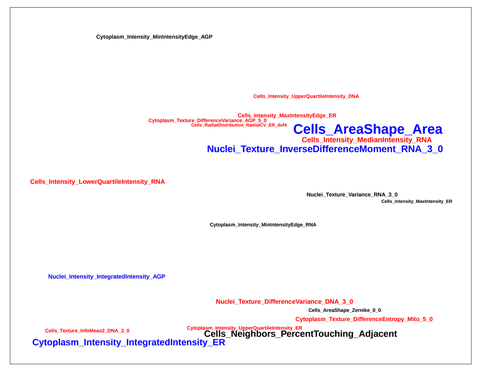
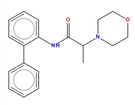
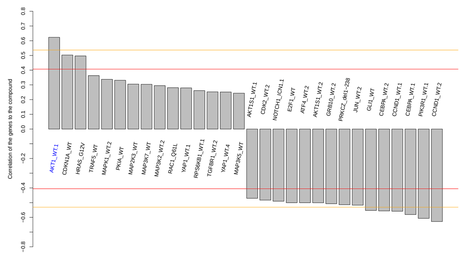
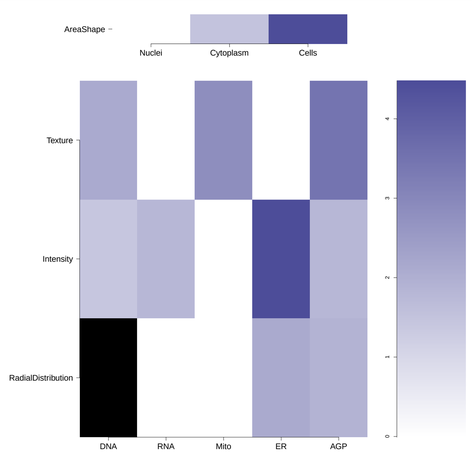
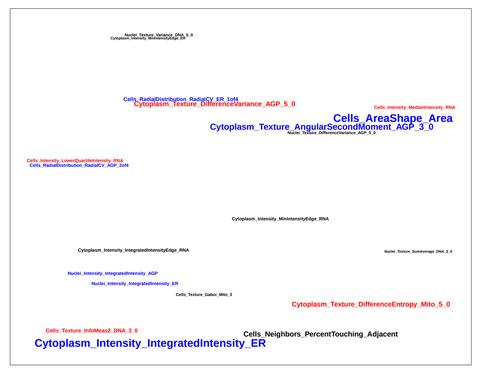
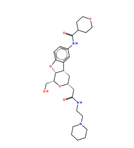
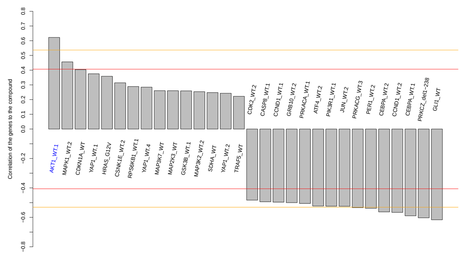
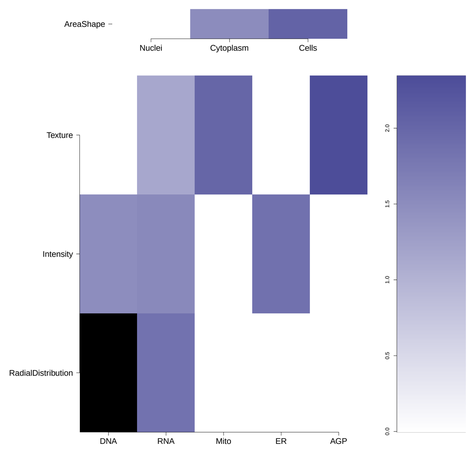
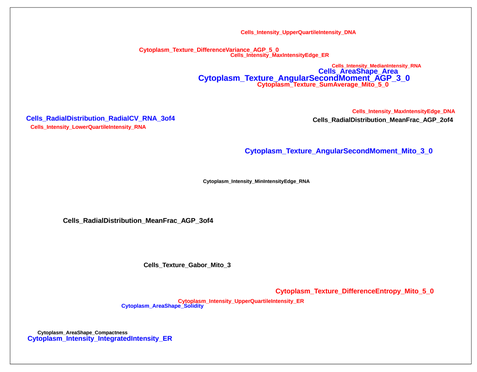
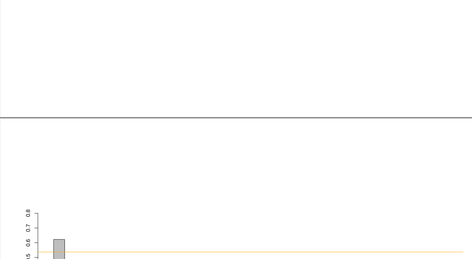
Which individual morphological features are distinguishing in the gene relative to the untreated samples? Blue/Red means the feature has a positive/negative z-score. Size is proportional to the z-score value.

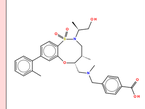
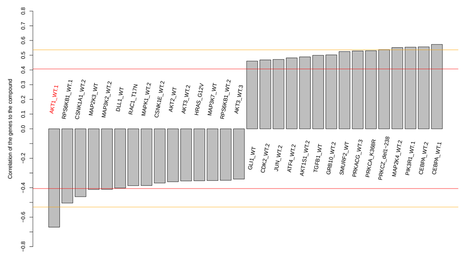
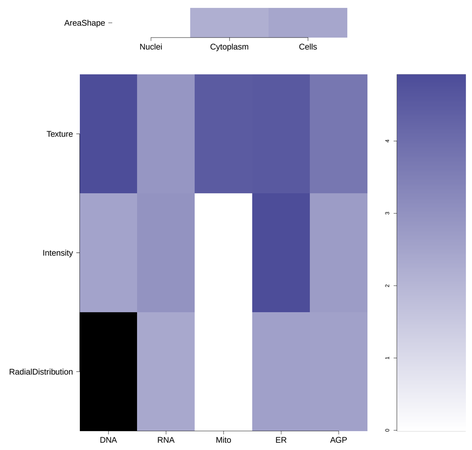
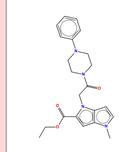
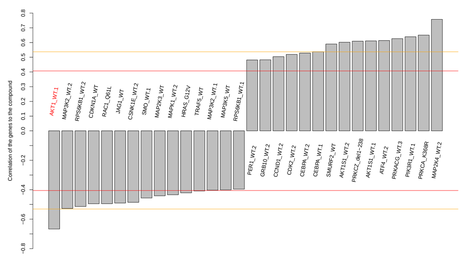
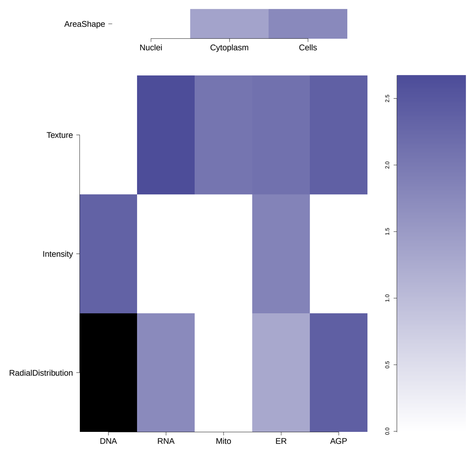
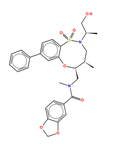
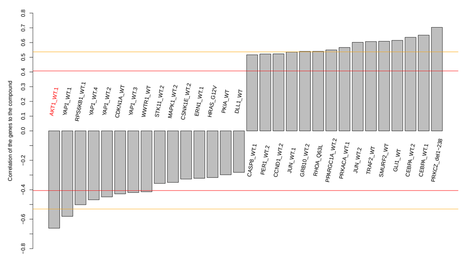
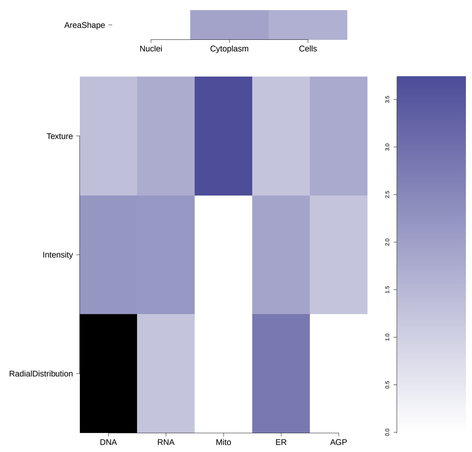
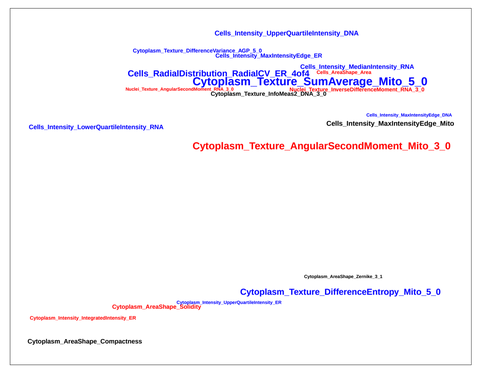
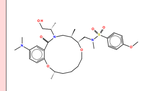
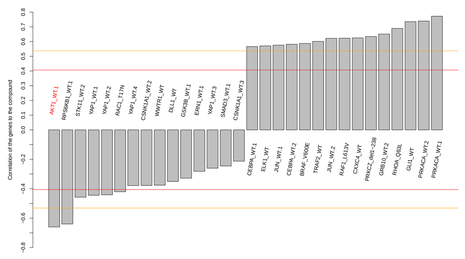
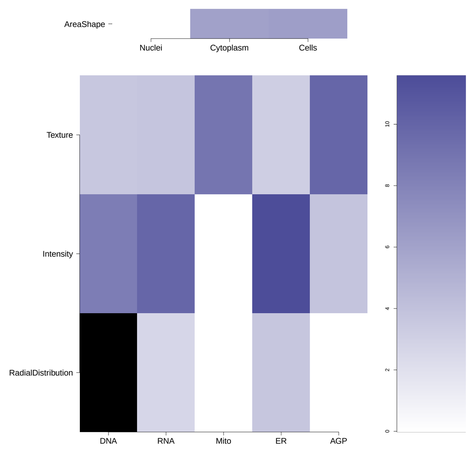
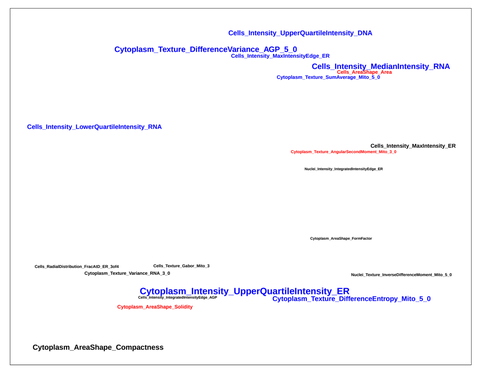
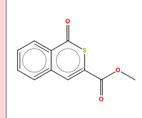
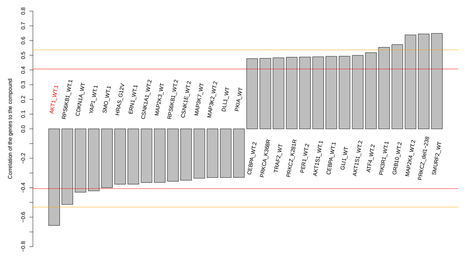
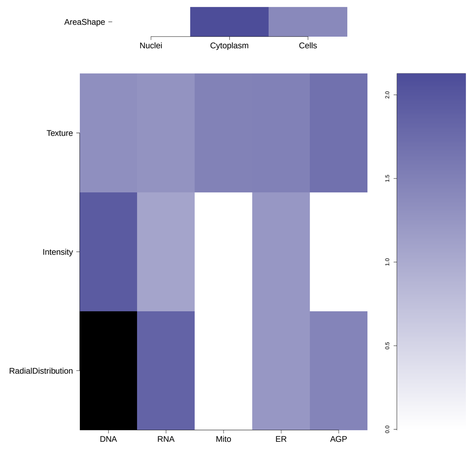
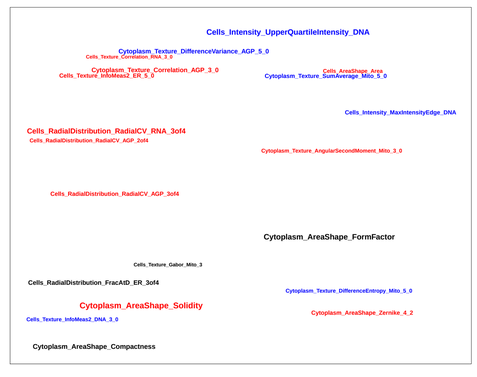
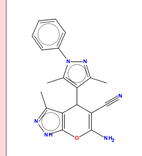
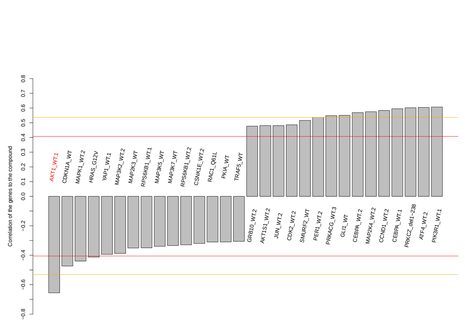
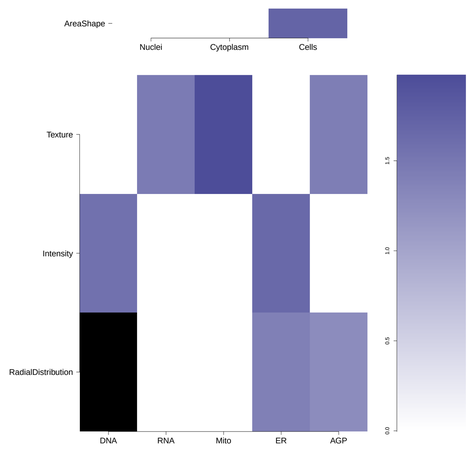
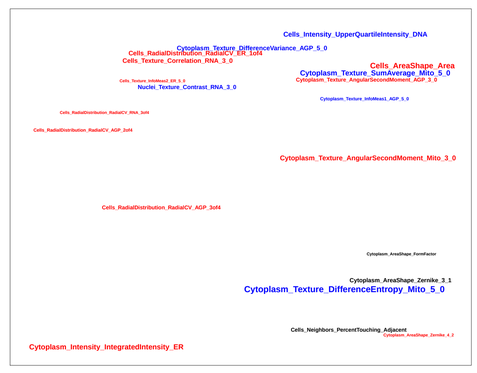
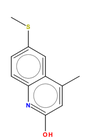
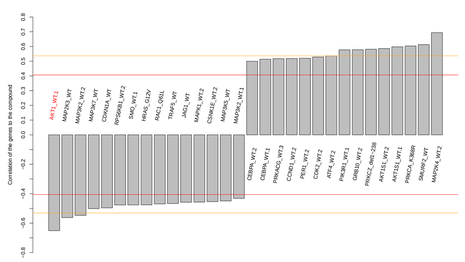
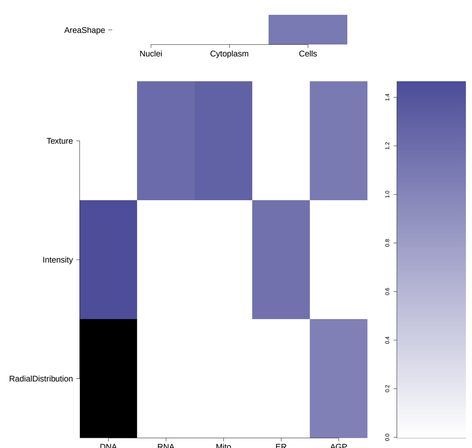


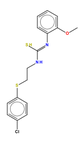
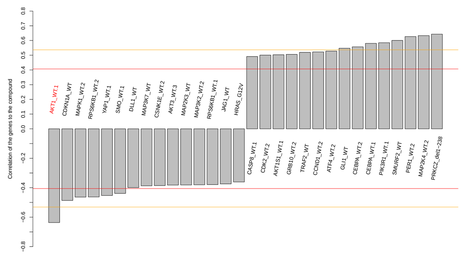
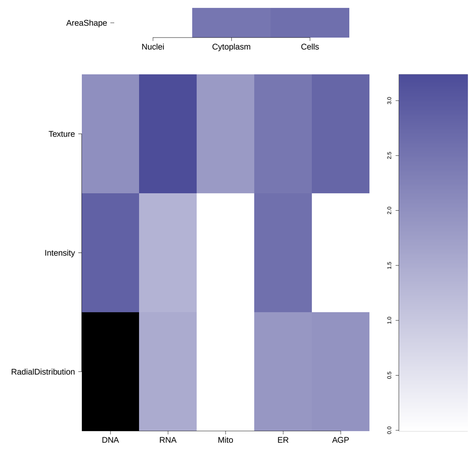
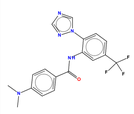
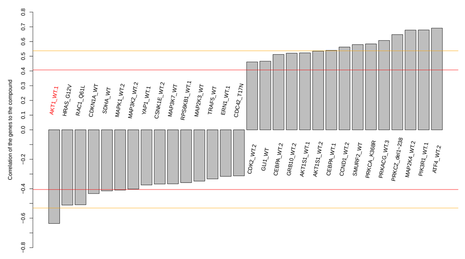
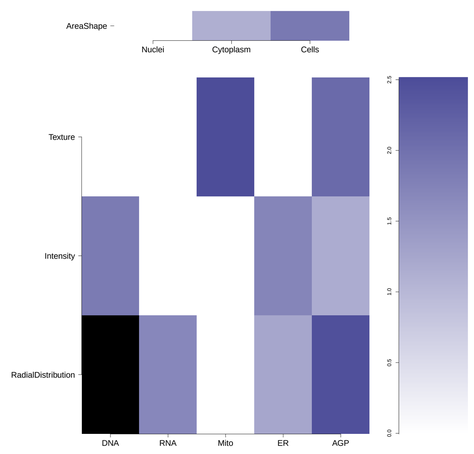
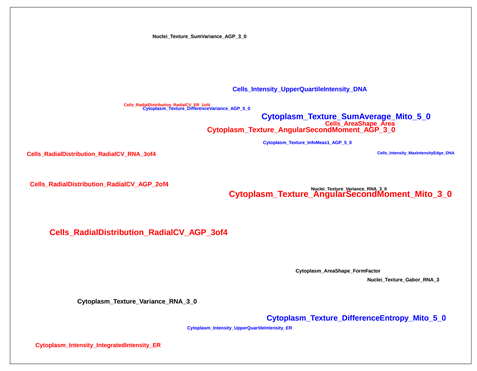
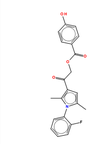
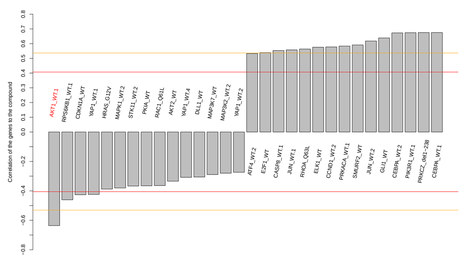
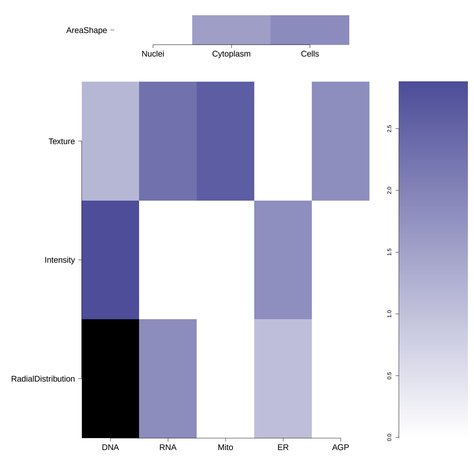
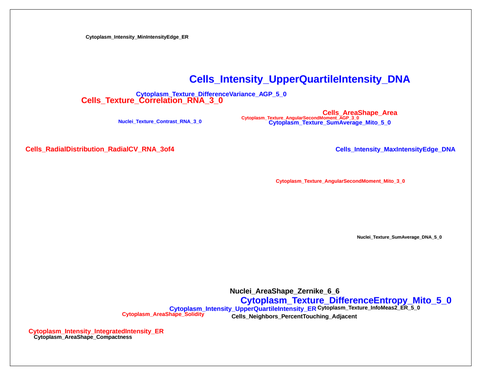


Compound IDs and common names (where available); blue/red colored box means the matching compound is positively/negatively correlated with the cluster	Chemical structure	Mean pairwise replicates correlation of the compound signature (95th DMSO replicate correlation is 0.52)	Correlation between compound 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-K80949975-004-10-0 MLS000678073 SMR000285925 PubChem CID : 16194139		NA (in 1 replicates)	0.67	NA				Total number of assays tested in: 625. Active in the following assays: • Primary cell-based high throughput screening assay to measure STAT1 activation (AID 932) • Confirmation cell-based high throughput screening assay to measure STAT1 activation (AID 1262) • Counterscreen assay for STAT1 activators: Cell-based high throughput assay to measure NF-kappaB activation (AID 1306) • Counterscreen assay for STAT1 activators: Cell-based high throughput assay to measure STAT3 activation (AID 1316) • qHTS Assay for Enhancers of SMN2 Splice Variant Expression (AID 1458) • Cycloheximide Counterscreen for Small Molecule Inhibitors of Shiga Toxin (AID 2314) • A qHTS for Small Molecule Inhibitors of Shiga Toxin (AID 2315) • HTS Luminescent assay for identification of inhibitors of Sentrin-specific protease 8 (SENP8) (AID 2540) • uHTS Luminescent assay for identification of inhibitors of Sentrin-specific protease 6 (SENP6) (AID 2599) • Luminescence-based primary cell-based high throughput screening assay to identify activators of the Aryl Hydrocarbon Receptor (AHR) (AID 2796) • Luminescence-based cell-based high throughput confirmation assay for activators of the Aryl Hydrocarbon Receptor (AHR) (AID 2845) • Counterscreen for activators of the Aryl Hydrocarbon Receptor (AHR): luminescence-based cell-based high throughput screening assay to identify activators of the Pregnane X Receptor (PXR) (AID 434939) • uHTS Luminescent assay for identification of inhibitors of Sentrin-specific protease 7 (SENP7) (AID 434973) • qHTS Assay for Rab9 Promoter Activators (AID 485297) • qHTS Assay for NPC1 Promoter Activators (AID 485313) • qHTS profiling assay for firefly luciferase inhibitor/activator using purifed enzyme and Km concentrations of substrates (counterscreen for miR-21 project) (AID 588342) • qHTS Assay for Inhibitors of Hepatitis C Virus (HCV) (AID 651820) • 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) • 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) • qHTS for Inhibitors of Inflammasome Signaling: IL-1beta AlphaLISA Primary Screen (AID 743279)
BRD-K52500055-001-01-3 PubChem CID : 44483979		0.72 (in 4 replicates)	0.67	0.098				Total number of assays tested in: 45.
BRD-A71556055-001-08-9 AC1O0OJ7 MLS002586209 HMS2386E13 PubChem CID : 6047409		NA (in 1 replicates)	0.65	NA				Total number of assays tested in: 696. Active in the following assays: • Human Endothelial Cell Proliferation Assay in 384-well format (AID 648) • Screening for Modulators of Post-Golgi Transport, Control Strain (AID 738) • CYP2C9 Assay (AID 777) • CYP2C19 Assay (AID 778) • Human Endothelial Cell Proliferation Assay - Dose Response (AID 822) • Modulators of the EP2 prostaglandin E2 receptor - Primary Screening (AID 940) • uHTS for Calpain Inhibitors (AID 1236) • MLPCN Streptokinase Expression Inhibition (AID 1662) • Luminescence Microorganism-Based Dose Confirmation HTS to Identify Compounds Cytotoxic to SK(-)GAS Group A Streptococcus (AID 1900) • Luminescence Microorganism-Based Dose Confirmation HTS to Identify Inhibitors of Streptokinase Promotor Activity (AID 1902) • Luminescence Microorganism-Based Dose Response HTS to Identify Compounds Cytotoxic to Streptococcus (AID 1915) • Luminescence Cell-Based Primary HTS to Identify Inhibitors of Cancer Stem Cells (AID 2717) • Luminescence Cell-Based Dose Retest to Confirm Inhibitors of Cancer Stem Cells (AID 449748) • Dose Response HTS Screen to Identify Cytotoxic Compounds of HMLE_sh_eGFP (AID 463074) • Primary cell-based high-throughput screening assay for identification of compounds that potentiate/activate regulator of G-protein signaling 4 (RGS4) (AID 463111) • In vivo-based yeast HTS to detect compounds rescuing yeast growth/survival of Plasmodium Falciparum HSP40-mediated toxicity Measured in Whole Organism System Using Plate Reader - 2120-01_Inhibitor_SinglePoint_HTS_Activity (AID 504582) • uHTS identification of small molecule inhibitors of the thioesterase domain of fatty acid synthase via a fluorescence intensity assay (AID 602261) • Validation assay for identification of compounds that activate the regulator of G-protein signaling 4 (RGS4) (AID 602282) • Counter screen for identification of compounds that activate the regulator of G-protein signaling 4 (RGS4): Non-induced cells with the primary screen assay (AID 602283) • qHTS Assay for Inhibitors of the HIV-1 protein Vpr (AID 651644) • 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) • QFRET-based biochemical primary high throughput screening assay to identify exosite inhibitors of ADAM10. (AID 720582) • QFRET-based biochemical primary high throughput screening assay to identify exosite inhibitors of ADAM17. (AID 720648) • Counterscreen for exosite inhibitors of ADAM17: Fluorescence resonance energy transfer (FRET)-based biochemical high throughput screening assay to identify inhibitors of ADAM10 (AID 743256) • Luminescent GLuc Reporter Gene Assay Primary HTS to Identify Small Molecule Activator of Glucose Dependent Insulin Secretion Measured in Cell-Based System Using Plate Reader - 7055-01_Activator_SinglePoint_HTS_Activity (AID 743287)

BRD-A24067393-001-06-0 MLS000519150 AC1N4YYT HMS1481J14 HMS2485I18 SMR000129569 EU-0077783 PubChem CID : 4136788		0.77 (in 3 replicates)	0.64	NA				Total number of assays tested in: 681. Active in the following assays: • CYP2C19 Assay (AID 778) • qHTS for Inhibitors of Tau Fibril Formation, Thioflavin T Binding (AID 1460) • uHTS absorbance assay for the identification of compounds that inhibit PHOSPHO1 (AID 1565) • uHTS identification of small molecule inhibitors of tim10-1 yeast via a luminescent assay (AID 463190) • uHTS identification of small molecule inhibitors of tim23-1 yeast via a luminescent assay (AID 463212) • Single concentration confirmation of small molecule inhibitors of tim10-1 yeast via a luminescent assay (AID 463213) • Single concentration confirmation of small molecule inhibitors of tim23-1 yeast via a luminescent assay (AID 463218) • Primary biochemical fluorescence polarization-based high throughput screening assay to identify inhibitors of protein arginine methyltransferase 1 (PRMT1) (AID 652257) • TRFRET-based biochemical primary high throughput screening assay to identify inhibitors of HIV-1 LEDGF/p75 DNA Integration (AID 743269) • qHTS for Inhibitors of Inflammasome Signaling: IL-1-beta AlphaLISA Primary Screen (AID 743279)
BRD-K82852127-001-05-7 SMR000176073 AC1LG02I MLS000552877 HMS2379P11 ZINC284181 STK869885 ZINC00284181 BAS 00796096 PubChem CID : 786620		0.79 (in 4 replicates)	0.64	NA				Total number of assays tested in: 648. Active in the following assays: • qHTS for inhibitors of ROR gamma transcriptional activity (AID 2551)
BRD-K58585880-001-01-9 PubChem CID : 44492034		0.86 (in 3 replicates)	0.63	0.769				Total number of assays tested in: 52.
BRD-A79317887-001-05-8 ASN 07088465 SMR000065273 T5420128 AC1MHD0V MLS000057867 MLS002632825 HMS2474B20 PubChem CID : 3000183		0.68 (in 4 replicates)	0.62	NA				Total number of assays tested in: 813. Active in the following assays: • Primary HTS assay to asses cytotoxicity for IL-1B stimulated NFkB expression. (AID 845) • Novel Modifiers of Toll-like and RIG-like Receptor Signaling-Poly IC Stimulus (AID 602277) • Fluorescence-based biochemical high throughput screening primary assay to identify inhibitors of Crimean-Congo Hemorrhagic Fever (CCHF) viral ovarian tumor domain protease (vOTU): Pep-AMC substrate (AID 651958) • QFRET-based biochemical high throughput primary assay to identify inhibitors of human group III secreted phospholipase A2 enzyme (HGIII-sPLA2) (AID 743126)
BRD-K03496708-001-01-5 PubChem CID : 54645817		0.55 (in 2 replicates)	0.62	0.635				Total number of assays tested in: 40.
BRD-K67716105-001-01-8 PubCHEM CID : 54638093		0.61 (in 3 replicates)	0.62	0.169				Total number of assays tested in: 36.
BRD-K93742092-001-05-8 MLS000559233 STK201638 SMR000177950 BAS 03293881 AC1MK000 BDBM56552 HMS2548H24 ZINC4739852 ZINC04739852 PubChem CID : 3146297		NA (in 1 replicates)	0.61	NA				Total number of assays tested in: 602. Active in the following assays: • Kallikrein 5 1536 HTS (AID 873) • Cycloheximide Counterscreen for Small Molecule Inhibitors of Shiga Toxin (AID 2314) • A qHTS for Small Molecule Inhibitors of Shiga Toxin (AID 2315) • HTS to identify inhibitors of TNF-alpha Induced Cell Death in Jurkat FADD-/- Cells. (AID 463075) • Identify inhibitors of TNF-alpha Induced Cell Death in Jurkat FADD-/- Cells: Confirmation Assay (AID 463178) • QFRET-based biochemical primary high throughput screening assay to identify exosite inhibitors of ADAM17. (AID 720648)

BRD-K34576879-001-01-0 PubChem CID : 54618169		0.88 (in 4 replicates)	-0.67	0.365				Total number of assays tested in: 42. Active in the following assays: • MLPCN ERAP1 Measured in Biochemical System Using Plate Reader - 7016-01_Inhibitor_Dose_CherryPick_Activity (AID 743317)
BRD-K59496950-001-06-2 SMR000008290 AC1LDHEO ASN 08222509 MLS000068187 MLS002538128 HMS2502P09 ZINC1337997 ZINC01337997 PubChem CID : 648117		NA (in 1 replicates)	-0.67	NA				Total number of assays tested in: 762. Active in the following assays: • Luminescence Cell-Based Primary HTS to Identify Transcriptional Activators of Hypoxia-Inducible Factor Pathway (AID 1910) • qHTS Inhibitors of AmpC Beta-Lactamase (assay with detergent) (AID 485294)
BRD-K53255530-001-01-8 PubChem CID : 54618578		0.79 (in 4 replicates)	-0.66	0.365				Total number of assays tested in: 39. Active in the following assays: • Small molecule inhibitors of miR122 Measured in Cell-Based System Using Plate Reader - 2144-01_Activator_SinglePoint_HTS_Activity (AID 623901) • Small molecule inhibitors of miR122 Measured in Cell-Based System Using Plate Reader - 2144-01_Activator_Dose_CherryPick_Activity (AID 651956)
BRD-K92570288-001-01-7 PubChem CID : 54614939		0.90 (in 4 replicates)	-0.66	0.941				Total number of assays tested in: 19.
BRD-K90062066-001-05-6 NSC403269 AC1Q5YXN MLS000085563 AC1L831T ZINC79326 HMS1428L12 HMS2163L14 HMS3314C21 CCG-25169 ZINC00079326 NSC-403269 IDI1 011289 SMR000020498 ST50075968 F1470-0040 PubChem CID : 345568		0.78 (in 3 replicates)	-0.66	NA				Total number of assays tested in: 786. Active in the following assays: • CYP2C19 Assay (AID 778) • Cycloheximide Counterscreen for Small Molecule Inhibitors of Shiga Toxin (AID 2314)
BRD-A72832265-001-06-3 MLS000548215 AC1NAQN8 HMS2366J06 STK315958 SMR000114937 PubChem CID : 4431146		0.76 (in 2 replicates)	-0.66	NA				Total number of assays tested in: 668. Active in the following assays: • Multiplex HTS Screen of TOR pathway GFP-fusion proteins in Saccharomyes cerevisiae_specifically_ MEP2_MLPCN. (AID 2016) • Multiplex HTS Screen of TOR pathway GFP-fusion proteins in Saccharomyes cerevisiae_specifically_ RPL19A_MLPCN. (AID 2025) • Fluorescence Cell-Free Homogenous Primary HTS to Identify Inhibitors of RecA Intein Splicing Activity (AID 2221) • Fluorescence Cell-Free Homogeneous Counter Screen to Identify Inhibitors of GFP Chromophore Formation (AID 434968) • Fluorescence Cell-Free Homogeneous Dose Retest to Identify Inhibitors of RecA-Intein Splicing Activity (AID 435010) • Fluorescence Cell-Free Homogeneous Secondary Screen to Identify Inhibitors of DnaB-Intein Splicing Activity (AID 449749) • Fluorescence Cell-Free Homogeneous Secondary Screen to Identify Non-Covalent Inhibitors of RecA-Intein Splicing Activity (AID 449750) • High-throughput multiplex microsphere screening for inhibitors of toxin protease, specifically Botulinum neurotoxin light chain F protease, MLPCN compound set (AID 588497) • qHTS for Inhibitors of Glutaminase (GLS) (AID 624170)
BRD-K90692821-001-05-6 STK632947 BAS 00898395 AC1LCOWB MLS000031732 HMS2299B24 ZINC8716787 ZINC08716787 SMR000009689 PubChem CID : 653661		NA (in 1 replicates)	-0.65	NA				Total number of assays tested in: 776. Active in the following assays: • qHTS Assay for Spectroscopic Profiling in 4-MU Spectral Region (AID 589) • qHTS Assay for Spectroscopic Profiling in A350 Spectral Region (AID 590) • Profiling the NIH Molecular Libraries Small Molecule Repository: Autofluorescence at 339/460 nm (AID 709) • qHTS Assay for Inhibitors of HADH2 (Hydroxyacyl-Coenzyme A Dehydrogenase, Type II) (AID 886) • qHTS Assay for Inhibitors of HSD17B4, hydroxysteroid (17-beta) dehydrogenase 4 (AID 893) • 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 Activators of ClpP (AID 651965)

BRD-K78272952-001-05-4 MLS000331542 SMR000220964 AC1M00XM BDBM48723 HMS2560K08 ZINC8684663 STK164689 ZINC08684663 ST50763472 PubChem CID : 2013382		0.83 (in 2 replicates)	-0.64	NA				Total number of assays tested in: 642. Active in the following assays: • uHTS for Small Molecule Inhibitors of Eukaryotic Translation Initiation (AID 782) • Chemical Genetic Screen to Identify Inhibitors of Mitochondrial Fusion - Primary Screen (AID 1362) • qHTS for inhibitors of ROR gamma transcriptional activity (AID 2551) • uHTS identification of small molecule inhibitors of tim23-1 yeast via a luminescent assay (AID 463212) • Single concentration confirmation of small molecule inhibitors of tim23-1 yeast via a luminescent assay (AID 463218)
BRD-K50700495-001-05-0 ZINC03217226 MLS000569421 AC1M5TOT HMS1399C03 HMS2313L04 ZINC3217226 SMR000155025 T0505-7968 PubChem CID : 2335893		NA (in 1 replicates)	-0.64	NA				Total number of assays tested in: 696. Active in the following assays: • High Content Assay for Compounds that inhibit the Assembly of the Perinucleolar Compartment (AID 2417) • Primary cell-based high-throughput screening for identification of compounds that antagonize MrgX1 receptor signaling (AID 588676)
BRD-K06736360-001-05-1 ZINC03416368 AC1M8DOD MLS000760967 HMS2708G03 ZINC3416368 SMR000372267 T5315952 PubChem CID : 2535434		NA (in 1 replicates)	-0.64	NA				Total number of assays tested in: 624. Active in the following assays: • Primary screen for compounds that activate Alzheimer's amyloid precursor (AID 1276) • Luminescence-based primary biochemical high throughput screening assay to identify inhibitors of the Heat Shock Protein 90 (HSP90) (AID 1789) • MLPCN Alpha-Synuclein 5'UTR - 5'-UTR binding - activators (AID 1814) • Luminescence-based confirmation biochemical high throughput screening assay for inhibitors of the Heat Shock Protein 90 (HSP90) (AID 1846) • Luminescence-based counterscreen assay for HSP90 inhibitors: biochemical high throughput screening assay to identify inhibitors of native luciferase. (AID 1847) • Luminescence Cell-Based Primary HTS to Identify Inhibitors of Heat Shock Factor 1 (HSF1). (AID 2098) • Cycloheximide Counterscreen for Small Molecule Inhibitors of Shiga Toxin (AID 2314) • A qHTS for Small Molecule Inhibitors of Shiga Toxin (AID 2315) • uHTS for identification of Inhibitors of Mdm2/MdmX interaction in luminescent format. (AID 485346) • Single concentration confirmation of uHTS for Inhibitors of Mdm2/MdmX interaction in luminescent format. (AID 489028) • Fluorescence polarization-based primary biochemical high throughput screening assay to identify inhibitors of human platelet activating factor acetylhydrolase 2 (PAFAH2) (AID 492956) • Single concentration confirmation of inhibitors of Mdm2/MdmX interaction using a Full-Length Luciferase Counterscreen assay (AID 504607) • Antagonist of Human D 1 Dopamine Receptor: qHTS (AID 504652) • Single concentration confirmation of inhibitors of Mdm2/MdmX interaction using a Brca1/Bard1 BiLC Counterscreen assay. (AID 504668) • qHTS profiling assay for firefly luciferase inhibitor/activator using purifed enzyme and Km concentrations of substrates (counterscreen for miR-21 project) (AID 588342) • Primary cell-based high-throughput screening for identification of compounds that activate/potentiate calcium-activated chloride channels (TMEM16A) (AID 623877) • qHTS of GLP-1 Receptor Inverse Agonists (Inhibition Mode) (AID 624417) • 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) • HTS for Bacterial rRNA inhibitors Measured in Microorganism-Based System Using Plate Reader - 7056-01_Inhibitor_SinglePoint_HTS_Activity (AID 720706)