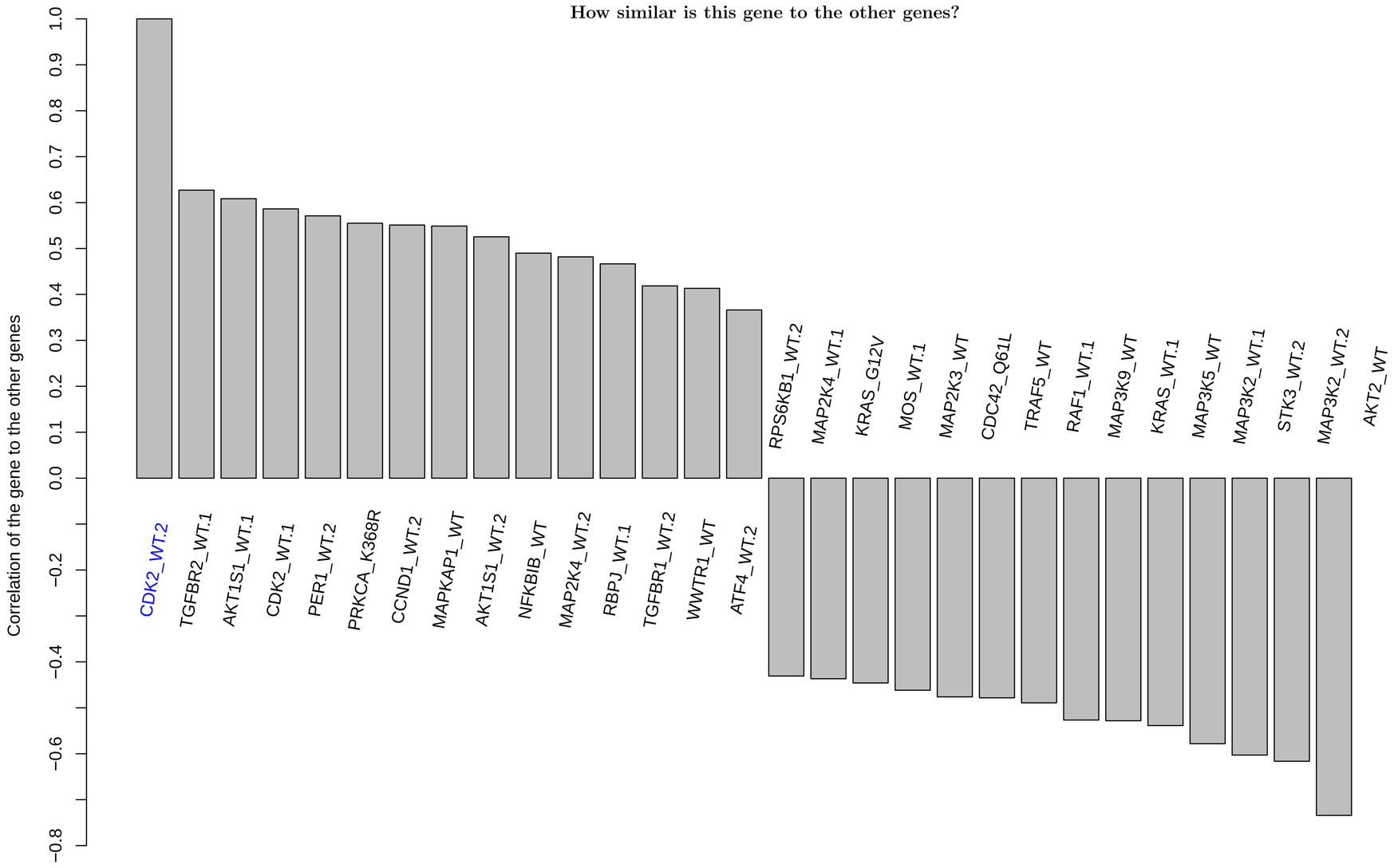
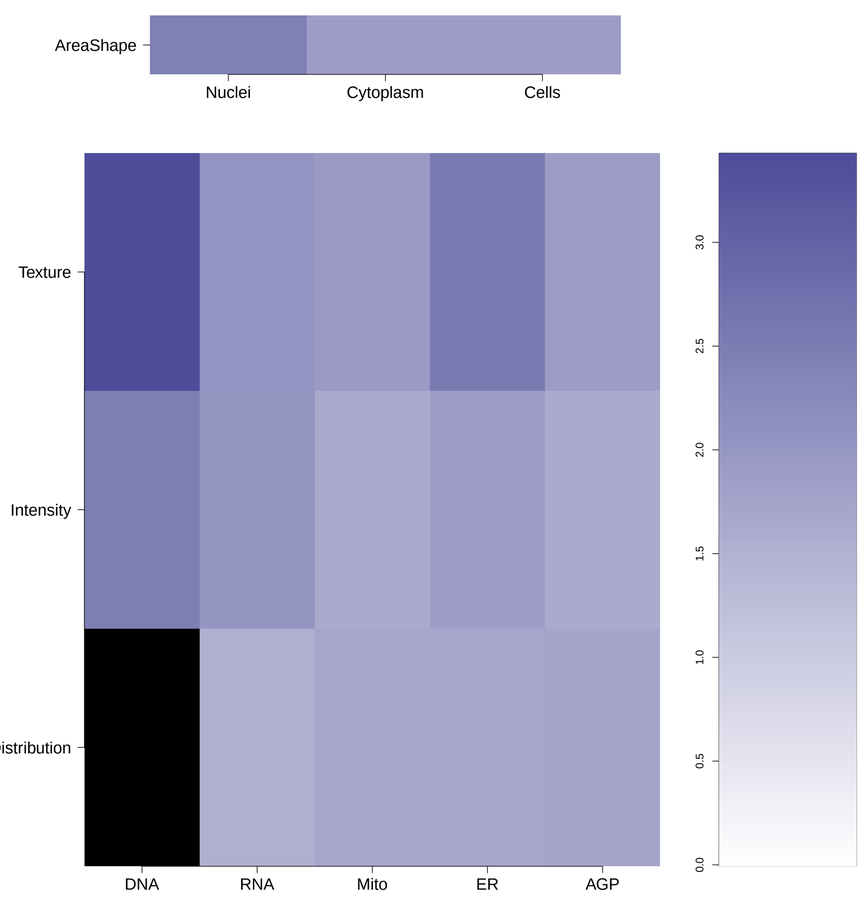
CDK2_WT.2 - in Canonical Cell Cycle

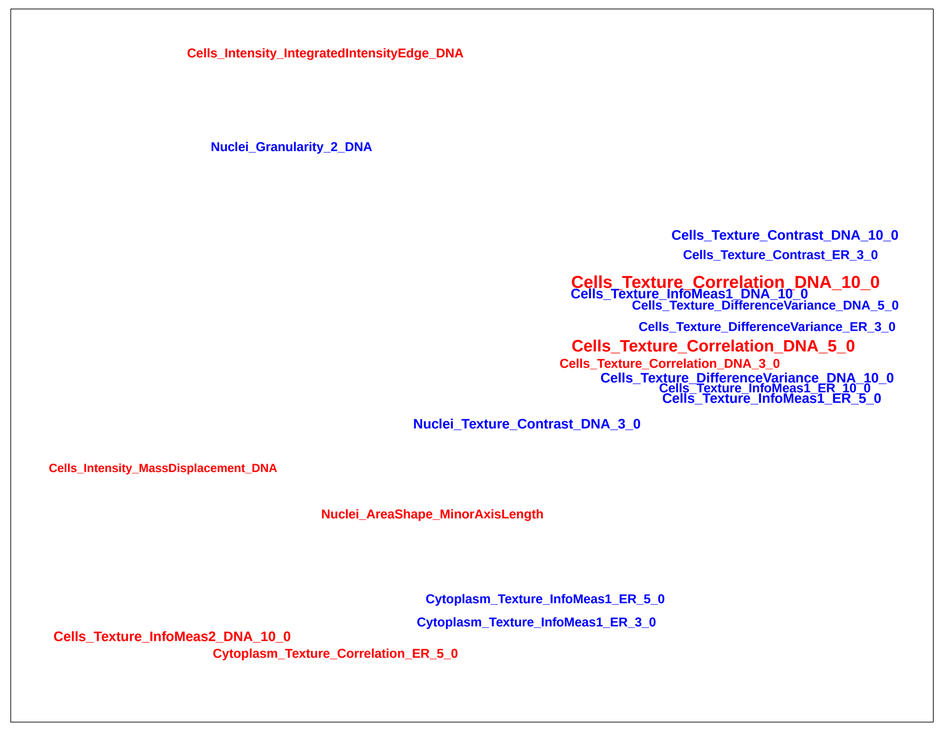
How similar is this gene to the other genes?

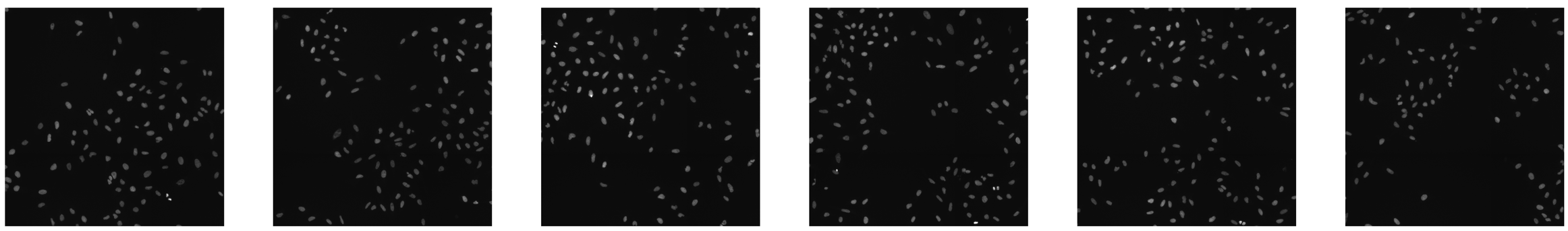


What groups of morphological features are distinguishing in the cluster relative to the untreated samples? (maximum of absolute m-score for the features belonging to the same category; m-score defined as median of a feature z-score across genes in the cluster) Black means no feature is available in the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

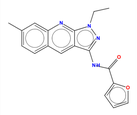
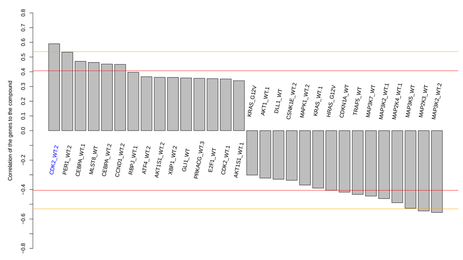
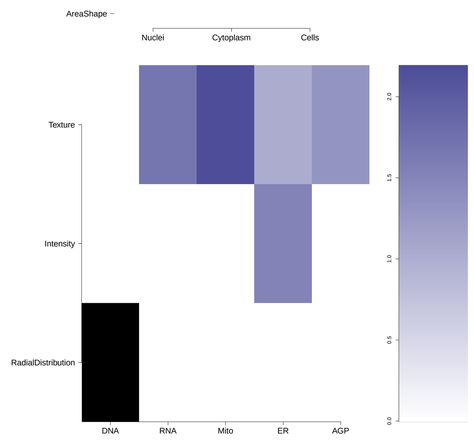
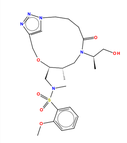
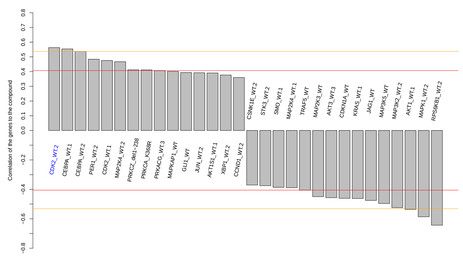
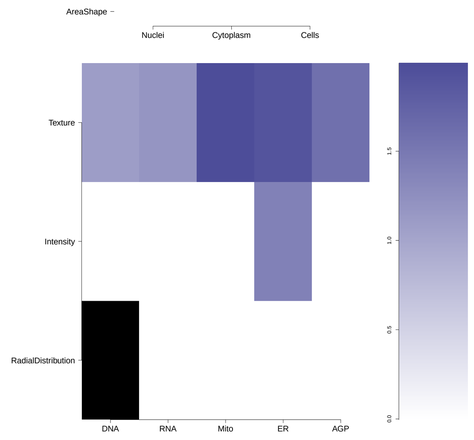
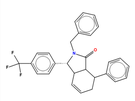
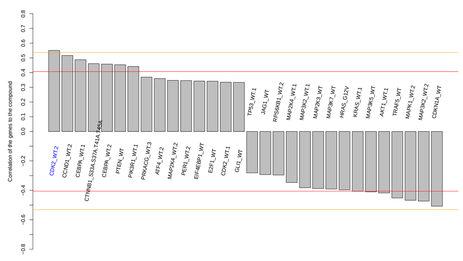
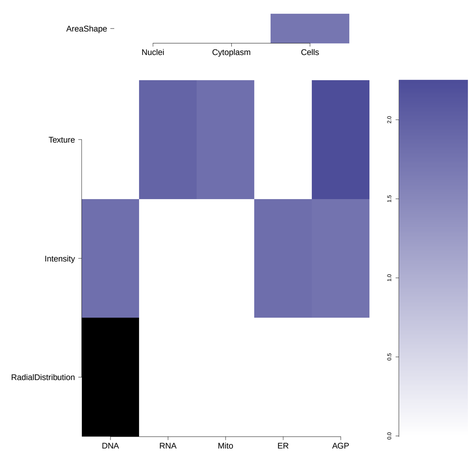
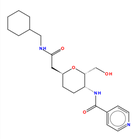
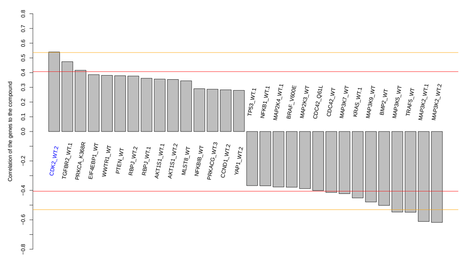
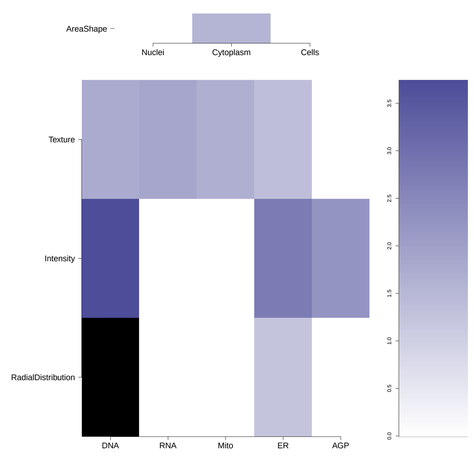
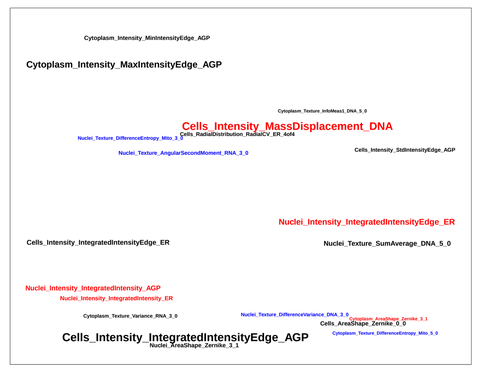
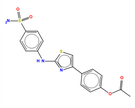
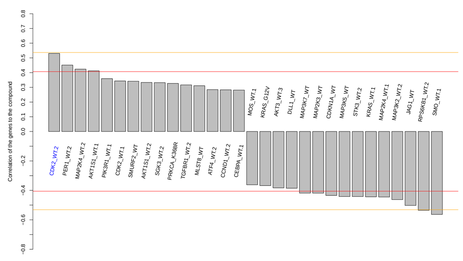
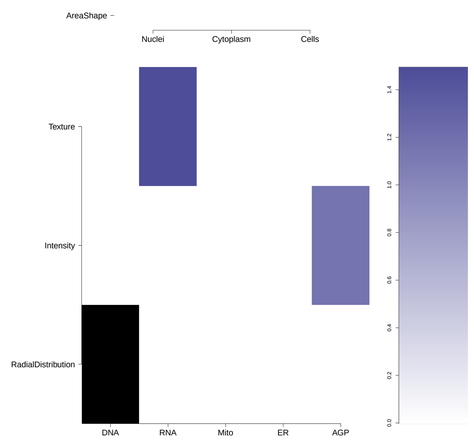
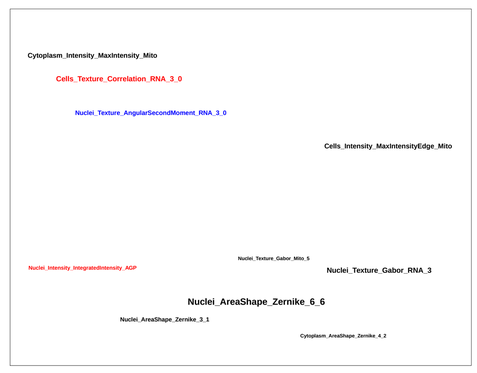
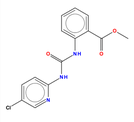
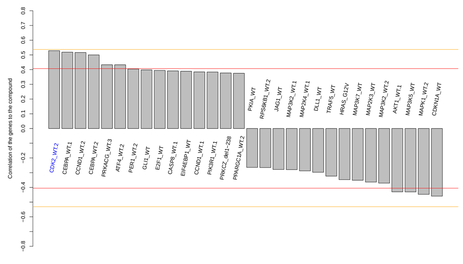
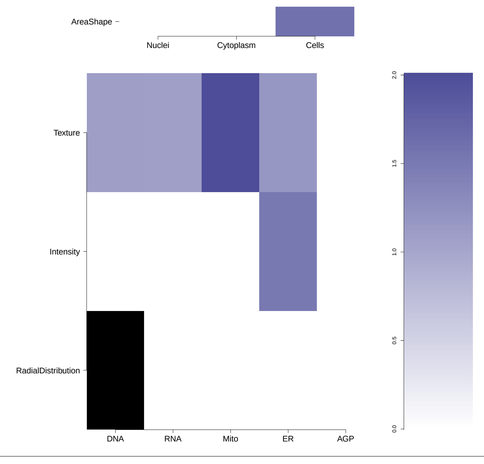


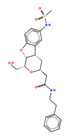
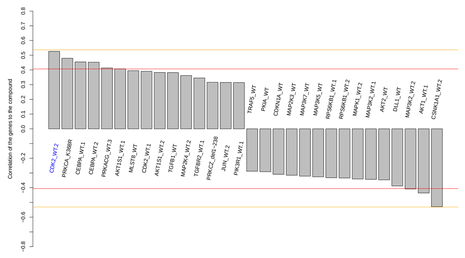
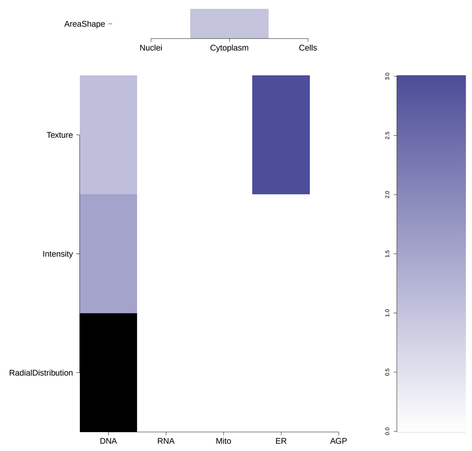
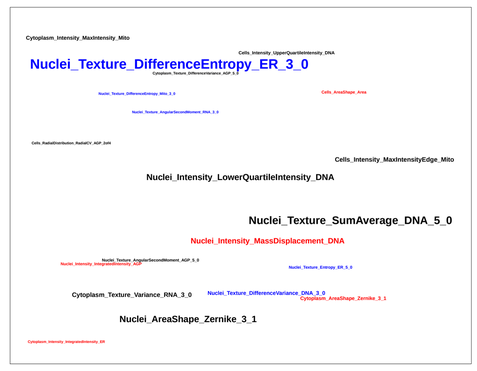
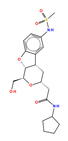
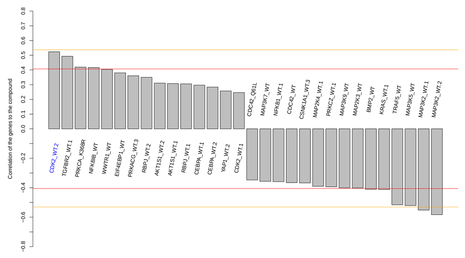
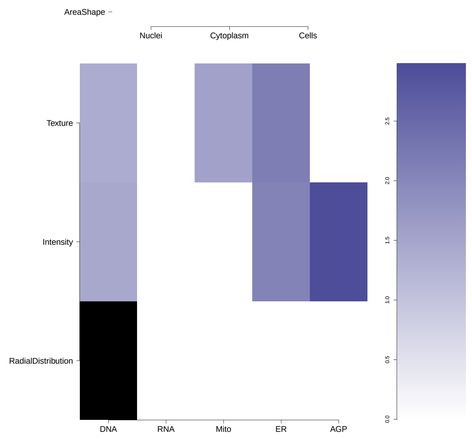
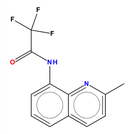
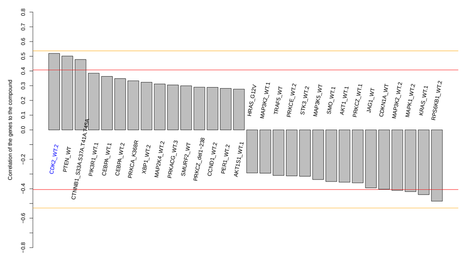
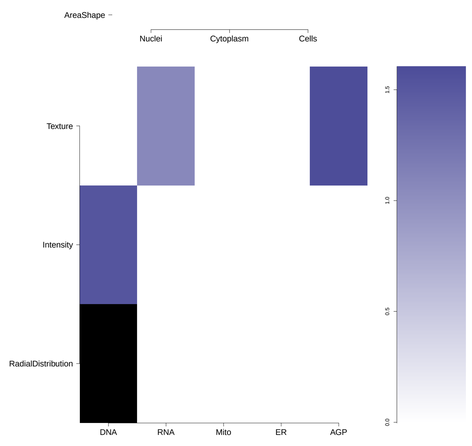
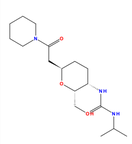
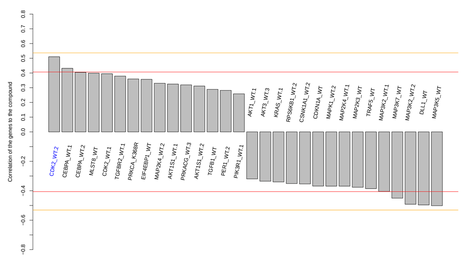
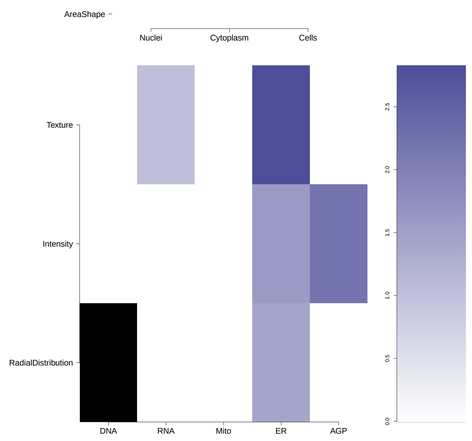
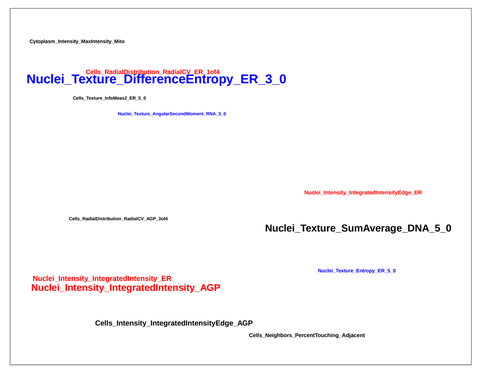
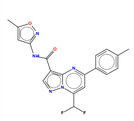
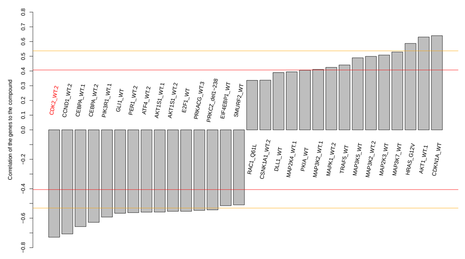
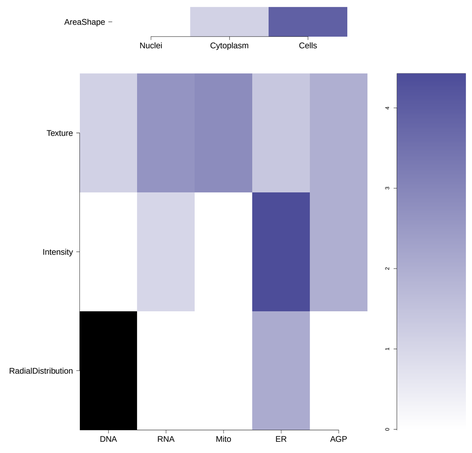
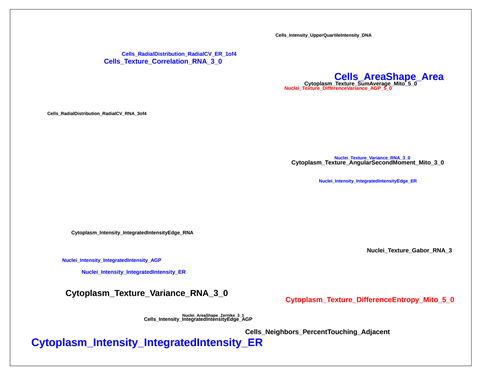
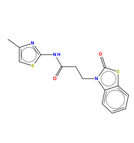
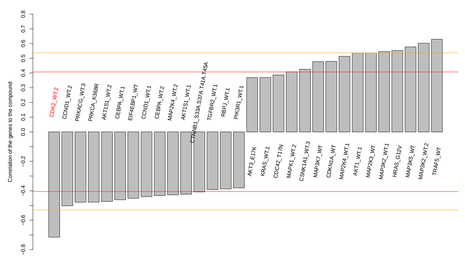
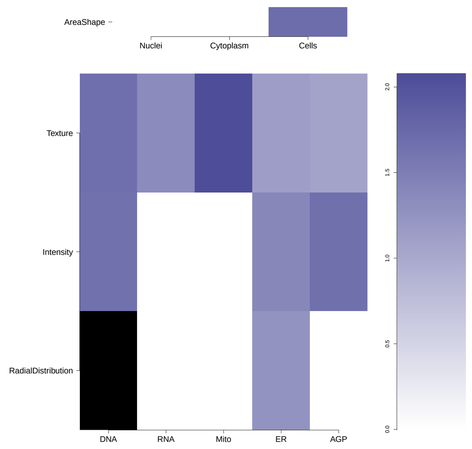
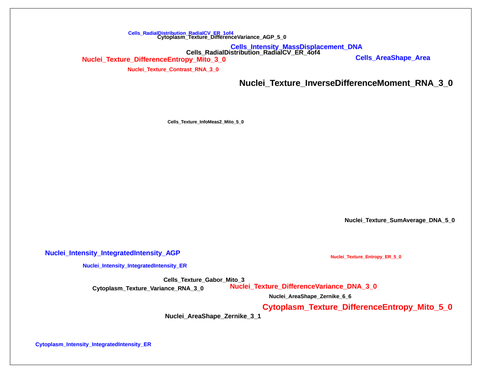
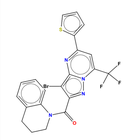
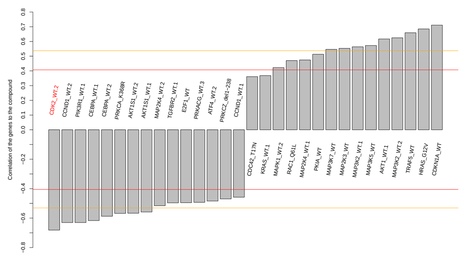
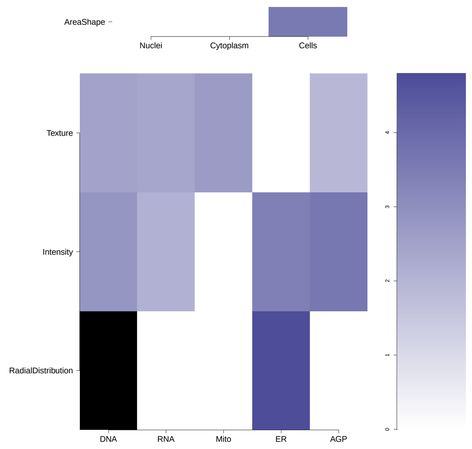
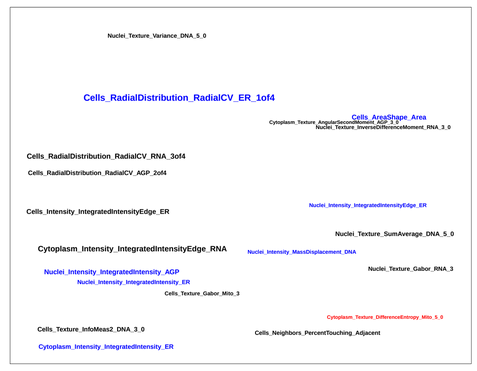
Which individual morphological features are distinguishing in the gene relative to the untreated samples? Blue/Red means the feature has a positive/negative z-score. Size is proportional to the z-score value.

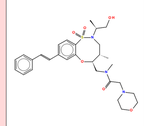
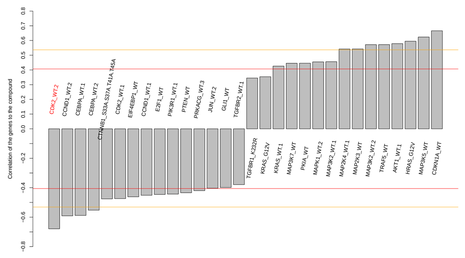
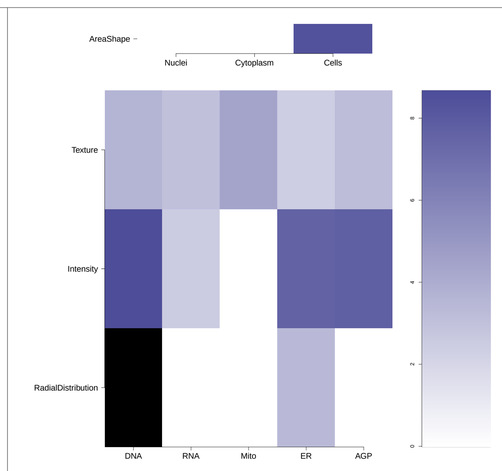
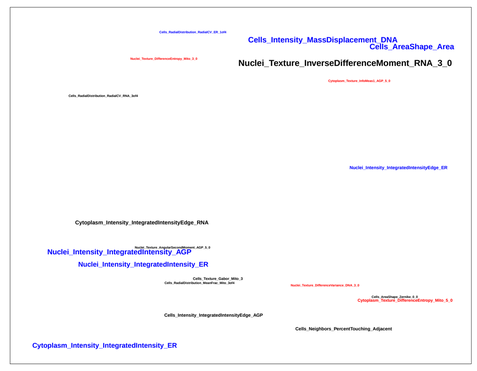
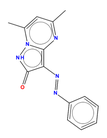
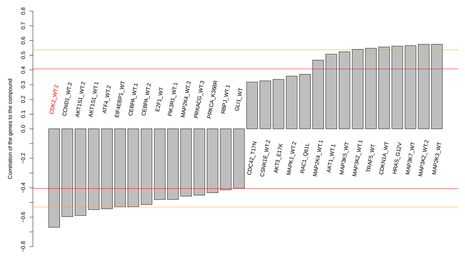
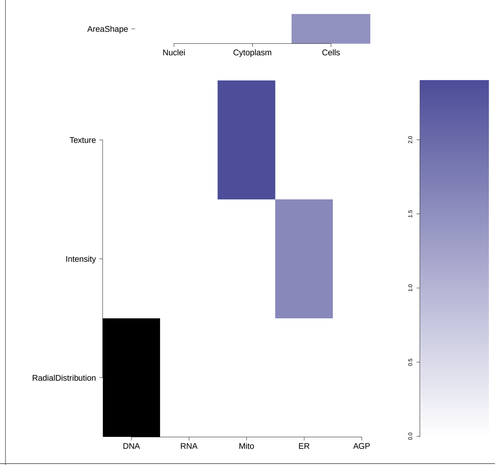
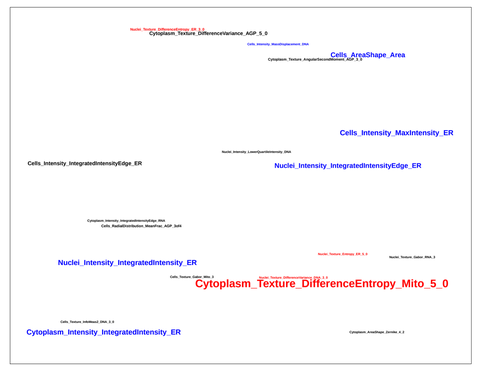
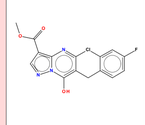
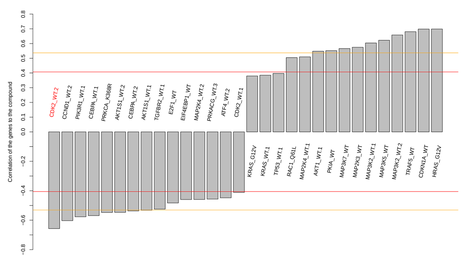
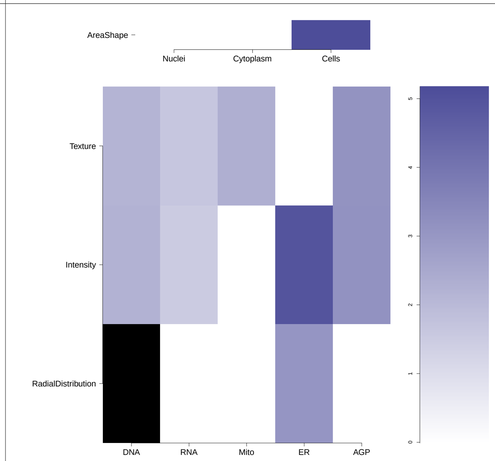
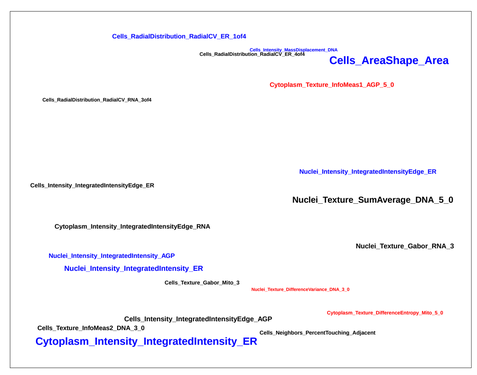
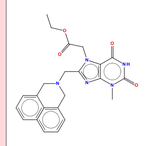
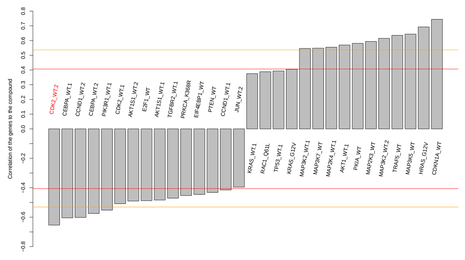
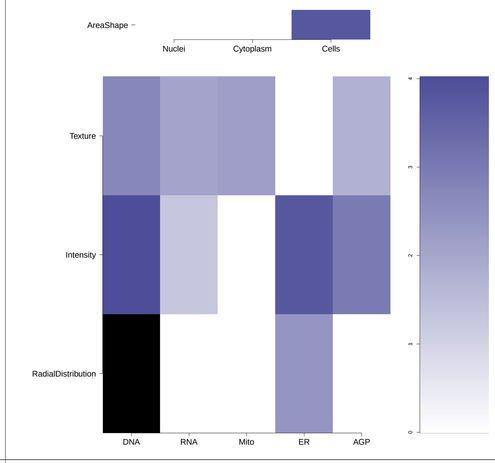
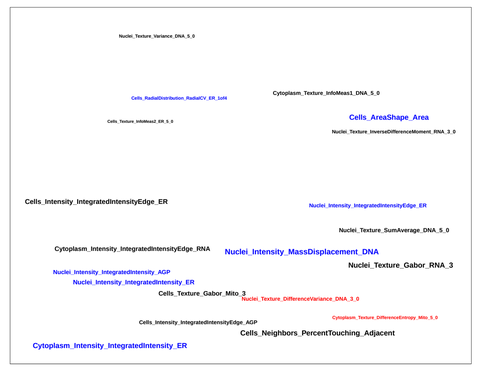
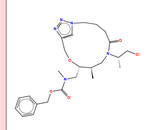
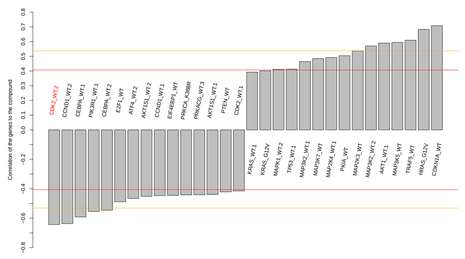
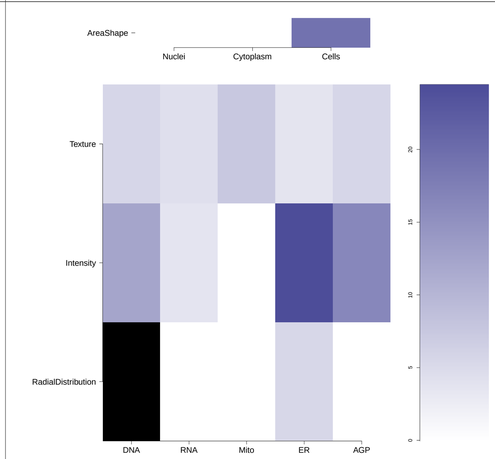
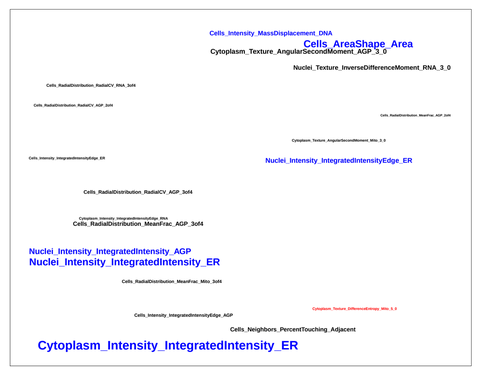
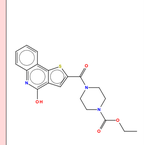
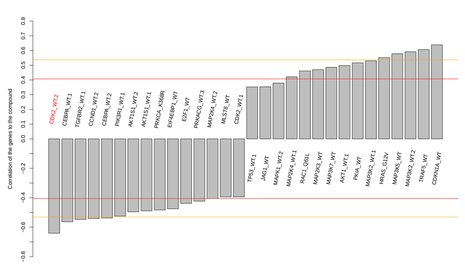
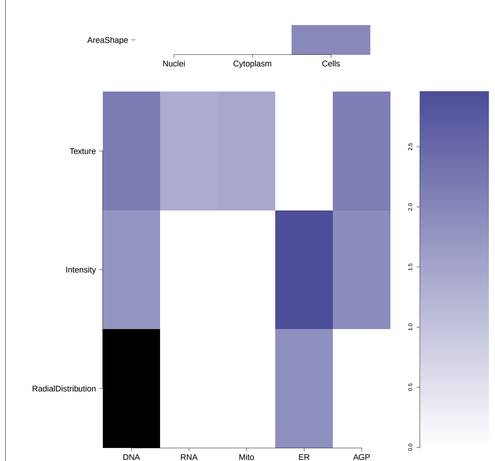
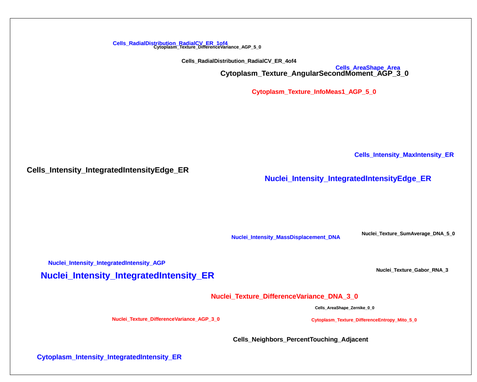




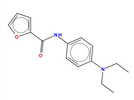
Compound IDs and common names (where available); blue/red colored box means the matching compound is positively/negatively correlated with the cluster	Chemical structure	Mean pairwise replicates correlation of the compound signature (95th DMSO replicate correlation is 0.52)	Correlation between compound 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-K73732735-001-05-6 MLS000040829 AC1LDCIY HMS1603D16 HMS2167K06 HMS3317D19 ZINC1238777 STL057406 ZINC01238777 SMR000045729 PubChem CID : 664852		NA (in 1 replicates)	0.59	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 HSD17B4, hydroxysteroid (17-beta) dehydrogenase 4 (AID 893) • Fluorescence Cell-Free Homogeneous Primary HTS to Identify Inhibitors of the RanGTP-Importin-beta complex (AID 2216) • qHTS Assay for Inhibitors of Histone Lysine Methyltransferase G9a (AID 504332) • A quantitative high throughput screen for small molecules that induce DNA re-replication in MCF 10a normal breast cells. (AID 624296) • A quantitative high throughput screen for small molecules that induce DNA re-replication in SW480 colon adenocarcinoma cells. (AID 624297)
BRD-K50140257-001-02-4 MLS003129312 SMR001833758 PubChem CID : 44496390		0.78 (in 3 replicates)	0.56	0.154				Total number of assays tested in: 229.
BRD-A14828191-001-06-1 MLS000882831 KUC101301N HMS2223M11 SMR000465398 PubChem CID : 16746349		0.56 (in 2 replicates)	0.55	NA				Total number of assays tested in: 557. Active in the following assays: • qHTS Assay for Antagonists of the Neuropeptide S Receptor: cAMP Signal Transduction (AID 1461) • Primary cell-based high-throughput screening assay for identification of compounds that inhibit KCNQ2 potassium channels (AID 2156) • qHTS Assay for Lipid Storage Modulators in Drosophila S3 Cells (AID 2685) • 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) • uHTS identification of small molecule inhibitors of tim10-1 yeast via a luminescent assay (AID 463190) • uHTS identification of small molecule inhibitors of tim10 yeast via a luminescent assay (AID 463195) • 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 tim10 yeast via a luminescent assay (AID 463215) • Single concentration confirmation of small molecule inhibitors of tim23-1 yeast via a luminescent assay (AID 463218) • 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) • Single concentration confirmation of inhibitors of Mdm2/MdmX interaction using a Full-Length Luciferase Counterscreen assay (AID 504607) • Single concentration confirmation of inhibitors of Mdm2/MdmX interaction using a Brca1/Bard1 BiLC Counterscreen assay. (AID 504668) • Primary qHTS for delayed death inhibitors of the malarial parasite plastid, 48 hour incubation (AID 504832) • Primary cell-based high-throughput screening for identification of compounds that inhibit/block calcium-activated chloride channels (TMEM16A) (AID 588511) • qHTS Fluorescence Polarization (FP) Assay for Inhibitors of MLL CXXC domain - DNA interaction: Fluorescein FP (AID 624160) • qHTS for Inhibitors of ATXN expression (AID 651635) • qHTS for Inhibitors of human tyrosyl-DNA phosphodiesterase 1 (TDP1): qHTS in cells in presence of CPT (AID 686979)
BRD-K39784035-001-01-6 PubChem CID : 54641194		NA (in 1 replicates)	0.54	NA				Total number of assays tested in: 38.
BRD-K85882511-015-05-5 AC1MGEUN Ambcb7869513 MLS000715607 HMS2737O17 SMR000275586 PubChem CID : 2959956		NA (in 1 replicates)	0.53	NA				Total number of assays tested in: 613. Active in the following assays: • Leishmania major promastigote HTS (AID 1063) • uHTS identification of small molecule inhibitors of Plasmodium falciparum Glucose-6-phosphate dehydrogenase via a fluorescence intensity assay (AID 504690) • qHTS for Inhibitors of Inflammasome Signaling: IL-1-beta AlphaLISA Primary Screen (AID 743279)
BRD-K61320284-001-05-9 ST50852663 ZINC00609392 AC1LJ82T MLS000675601 HMS1593H07 HMS2699J20 ZINC609392 STK459579 SMR000294095 PubChem CID : 970084		0.55 (in 3 replicates)	0.53	NA				Total number of assays tested in: 630. Active in the following assays: • Aqueous Solubility from MLSMR Stock Solutions (AID 1996)

BRD-K96165286-001-01-4 PubChem CID : 54645911		0.54 (in 2 replicates)	0.53	0.727				Total number of assays tested in: 40.
BRD-K51368089-001-01-6 PubChem CID : 54646145		0.72 (in 4 replicates)	0.52	0.995				Total number of assays tested in: 38.
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)	0.52	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-K79848778-001-01-1 PubChem CID : 54641224		NA (in 1 replicates)	0.51	NA				Total number of assays tested in: 38.
BRD-K99447049-001-04-5 ZINC00815361 SMR000092393 AC1LM0O9 MLS000115228 MLS001368098 HMS2251O07 ZINC815361 STK961361 CCG-117641 BAS 09530694 ST50718758 PubChem CID : 1094029		NA (in 1 replicates)	-0.73	NA				Total number of assays tested in: 783.
BRD-K90126707-001-05-4 F0643-0459 MLS000045436 AC1LGAHT HMS2383L06 ZINC246109 CCG-29170 ZINC00246109 SMR000027199 ST50129652 PubChem CID : 767828		NA (in 1 replicates)	-0.72	NA				Total number of assays tested in: 783. Active in the following assays: • CYP2C19 Assay (AID 778) • HTS Assay for Activators of Cytochrome P450 2A9 (AID 1024) • Multiplex HTS Assay for Inhibitors of MEK Kinase PB1 Domains, specifically MEK5 MEK Kinase3 Wildtype (AID 1529)
BRD-K74196031-001-05-4 ST50002594 BAS 00435184 AC1LL0T8 MLS000559810 HMS2583G23 ZINC827087 STK342806 ZINC00827087 SMR000175006 PubChem CID : 1102016		0.83 (in 3 replicates)	-0.68	NA				Total number of assays tested in: 629. Active in the following assays: • Leishmania major promastigote HTS (AID 1063) • High Throughput Imaging Assay for Hepatic Lipid Droplet Formation (AID 1656) • MLPCN Alpha-Synuclein 5'UTR - 5'-UTR binding - inhibitors (AID 1813) • Cycloheximide Counterscreen for Small Molecule Inhibitors of Shiga Toxin (AID 2314) • Single concentration confirmation of HCS identification of small molecules that inhibit hepatic lipid droplet formation (AID 463183) • High-throughput multiplex microsphere screening for inhibitors of toxin protease, specifically Botulinum neurotoxin light chain A protease, MLPCN compound set (AID 588499) • uHTS identification of small molecule inhibitors of the thioesterase domain of fatty acid synthase via a fluorescence intensity assay (AID 602261) • 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)

BRD-K40487298-001-01-5 PubChem CID : 54618868		0.91 (in 3 replicates)	-0.68	0.273				Total number of assays tested in: 32.
BRD-K64559563-001-05-1 AC1MWQV4 MLS000325274 HMS2182E12 STK063097 STL150982 ZINC18054886 ZINC18116461 SMR000161353 PubChem CID : 3803612		0.64 (in 2 replicates)	-0.67	NA				Total number of assays tested in: 664. Active in the following assays: • High throughput screening of inhibitors of transient receptor potential cation channel C6 (TRPC6) (AID 2553) • Specificity screen against TRPC4 for compounds that inhibit transient receptor potential cation channel C6 (TRPC6) (AID 2777) • Counter screen for compounds that inhibit transient receptor potential cation channel C6 (TRPC6) (AID 2780) • FRET-based cell-based primary high throughput screening assay to identify antagonists of the orexin 1 receptor (OX1R; HCRTR1) (AID 485270) • Counterscreen for antagonists of the orexin 1 receptor (OX1R; HCRTR1): Homogenous time resolved fluorescence (HTRF)-based cell-based assay to identify antagonists of the parental CHO-K1 cell line (AID 493232) • qHTS Assay for Inhibitors of Histone Lysine Methyltransferase G9a (AID 504332)
BRD-K78412459-001-07-0 MLS000095975 SMR000031523 AC1MMEHN BDBM64930 HMS1510I13 HMS2441M20 PubChem CID : 3237493		0.81 (in 3 replicates)	-0.66	NA				Total number of assays tested in: 789. Active in the following assays: • CYP2C9 Assay (AID 777) • HCS for Compounds that Up-Regulate Insulin Promoter Activity in MIN6 Cells (AID 1625) • qHTS Multiplex Assay to Identify Dual Action Probes in a Cell Model of Huntington: Aggregate Formation (GFP) (AID 1688) • Fluorescence Cell-Based Primary HTS of C.albicans growth in the presence of Fluconazole and compound (AID 1979) • Fluorescence Cell-Based Secondary Assay to Identify Inhibitors of Resistant C. albicans Growth in the Presence of Fluconazole (AID 2423) • Fluorescence Cell-Based Retest of C. albicans Growth in the Presence of Fluconazole (AID 2467) • Primary qHTS for delayed death inhibitors of the malarial parasite plastid, 96 hour incubation (AID 504834)
BRD-K99043334-001-05-3 T5820256 SMR000028676 MLS000093046 AC1MMDH8 MLS000863462 HMS2432G12 ZINC57388152 ST51073581 PubChem CID : 3237033		0.86 (in 3 replicates)	-0.65	NA				Total number of assays tested in: 773. Active in the following assays: • Cytochrome panel assay with activity outcomes (AID 1851) • Primary qHTS for delayed death inhibitors of the malarial parasite plastid, 96 hour incubation (AID 504834)
BRD-K95805172-001-02-1 MLS003129772 SMR001834218 PubChem CID : 44485063		0.93 (in 3 replicates)	-0.64	0.273				Total number of assays tested in: 229.
BRD-K68443944-001-05-4 AC1MMDQK SMR000026898 MLS000045306 HMS2349D12 PubChem CID : 3237154		0.72 (in 3 replicates)	-0.64	NA				Total number of assays tested in: 751. 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 HSD17B4, hydroxysteroid (17-beta) dehydrogenase 4 (AID 893) • High Content Assay for Compounds that inhibit the Assembly of the Perinucleolar Compartment (AID 2417) • uHTS identification of small molecule antagonists of the EBI2 receptor via a luminescent beta-arrestin assay (AID 651636) • Single concentration confirmation of uHTS hits from a small molecule antagonists of the EBI2 receptor via a luminescent beta-arrestin assay (AID 651997) • qHTS for Inhibitors of human tyrosyl-DNA phosphodiesterase 1 (TDP1): qHTS in cells in absence of CPT (AID 686978)

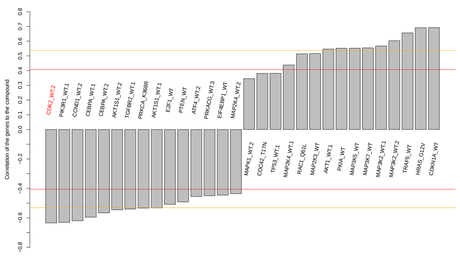
BRD-K06654104-001-05-7
MLS000061602
SMR000069932
AC1LDTK2
AC1Q2Z21
BDBM49291
ZINC37773
HMS2456J14
STK254553
BAS 02571831
ST053202
EU-0069346
PubChem CID : 675057

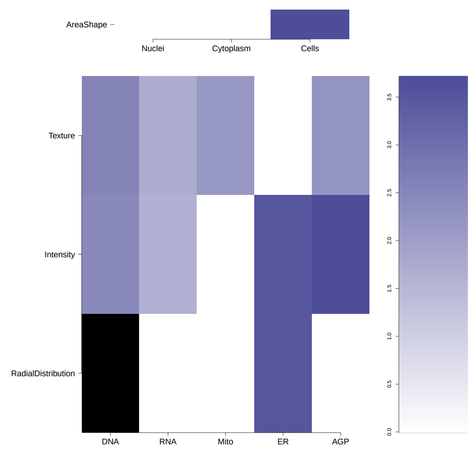


0.85 (in 3 replicates)

-0.63

NA





Total number of assays tested in: 766. Active in the following assays:

- qHTS Assay for Inhibitors of Firefly Luciferase (AID 411)
- Allosteric Modulators of D1 Receptors: Primary Screen (AID 641)
- qHTS Screen for Compounds that Selectively Target Cancer Cells with p53 Mutations: Cytotoxicity of p53ts Cells at the Nonpermissive Temperature (AID 902)
- qHTS Screen for Compounds that Selectively Target Cancer Cells with p53 Mutations: Cytotoxicity of p53ts Cells at the Permissive Temperature (AID 924)
- Counter Screen for Luciferase-based Primary Inhibition Assays (AID 1006)
- High Throughput Screen to Identify Compounds that increase expression of NF-kB in Human Neuronal Cells - Primary Screen (AID 1239)
- Name: High Throughput Screen to Identify Compounds that increase expression of NF-kB in Human Neuronal Cells - Dose Response (AID 1241)
- Primary screen for compounds that activate Alzheimer's amyloid precursor (AID 1276)
- uHTS for the identification of compounds that potentiate TRAIL-induced apoptosis of cancer cells (AID 1443)
- Identification of compounds which are cytotoxic to PPC-1 cells. (AID 1447)
- qHTS Assay for Enhancers of SMN2 Splice Variant Expression (AID 1458)
- uHTS absorbance assay for the identification of compounds that inhibit PHOSPHO1 (AID 1565)
- Identification of SV40 T antigen inhibitors: A route to novel anti-viral reagents (AID 1903)
- Cycloheximide Counterscreen for Small Molecule Inhibitors of Shiga Toxin (AID 2314)
- A qHTS for Small Molecule Inhibitors of Shiga Toxin (AID 2315)
- A biochemical assay using the ADP-Hunter methodology, purified TAg, and ATP to identify compounds that inhibit the ATPase activity of Tag - Counter Screen (AID 2501)
- qHTS Assay for NPC1 Promoter Activators (AID 485313)
- qHTS Assay for Inhibitors of Histone Lysine Methyltransferase G9a (AID 504332)
- qHTS screen for small molecules that induce genotoxicity in human embryonic kidney (HEK293T) cells expressing luciferase-tagged ELG1 (AID 504466)
- qHTS profiling assay for firefly luciferase inhibitor/activator using purifed enzyme and Km concentrations of substrates (counterscreen for miR-21 project) (AID 588342)
- uHTS identification of Caspase-8 TRAIL sensitizers in a luminesence assay (AID 624354)
- Counterscreen of compound fluorescence effects on High-throughput multiplex microsphere screening for inhibitors of toxin protease (AID 624483)
- Single concentration confirmation of Caspase-8 TRAIL sensitizer hits in a luminesence panel assay (AID 651596)
- Luminescence-based cell-based primary high throughput screening assay for inhibitors of the orphan nuclear receptor subfamily 0, group B, member 1 (DAX1; NR0B1): repression of SF-1 (NR5A1) activated StAR promoter by full-length DAX-1 (AID 652010)
- 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)
- High Throughput Screen to Identify Inhibitors Targeting HIV-1 Vif-dependent Degradation of Human APOBEC3G: A time-resolved fluorescence resonance energy transfer (TR-FRET) assay for HIV-1 Vif-APOBEC3G interaction (AID 1117319)