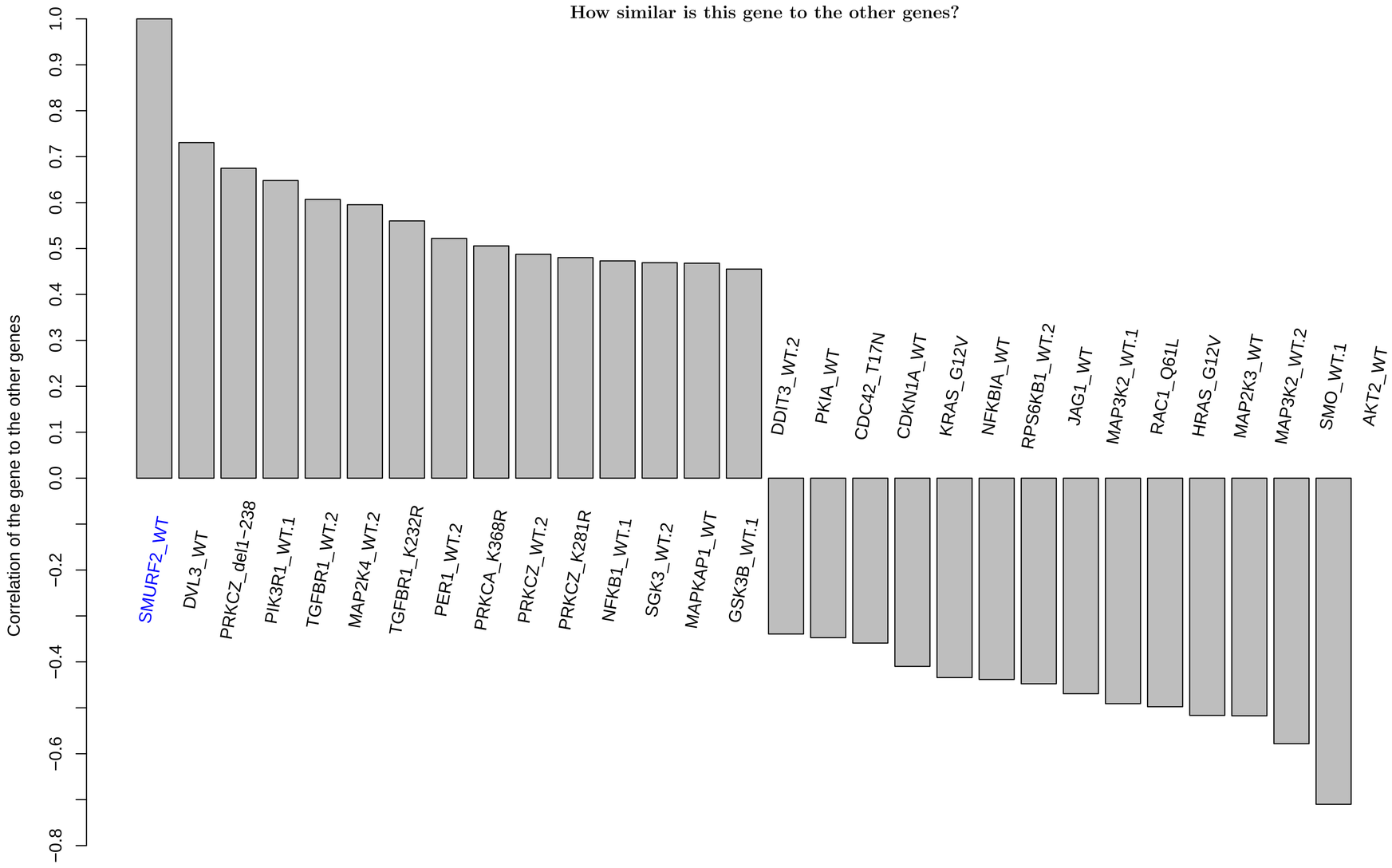
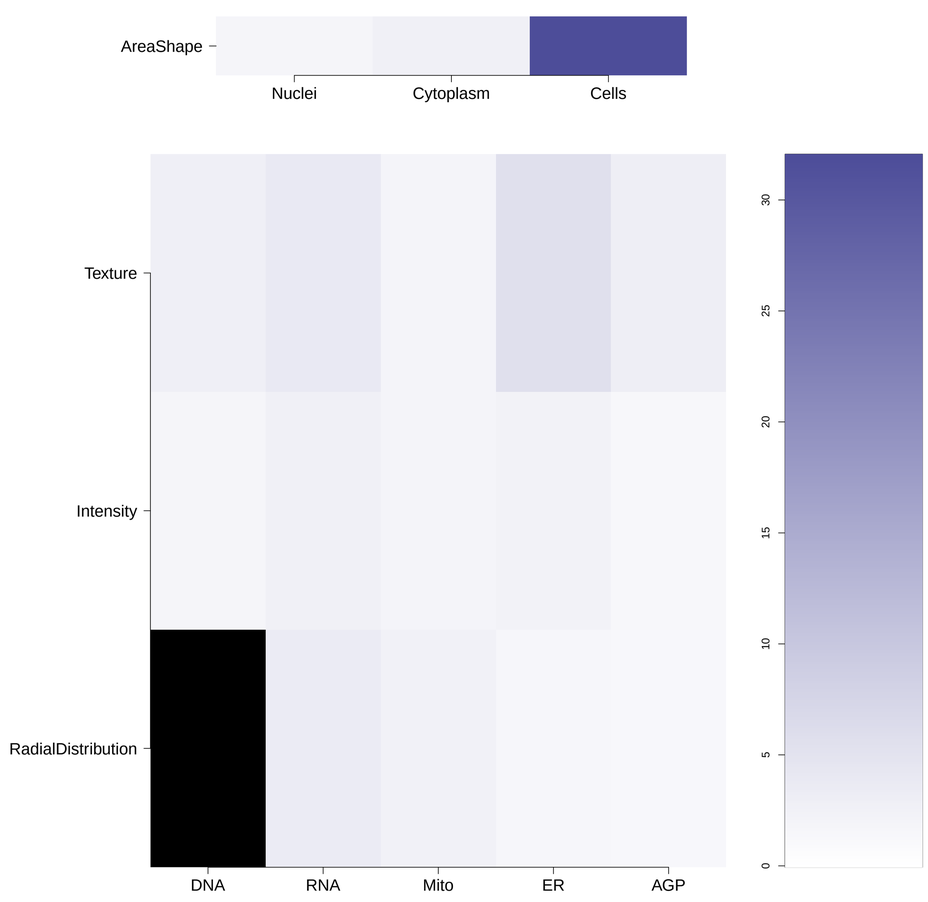
SMURF2_WT - in Canonical SMAD

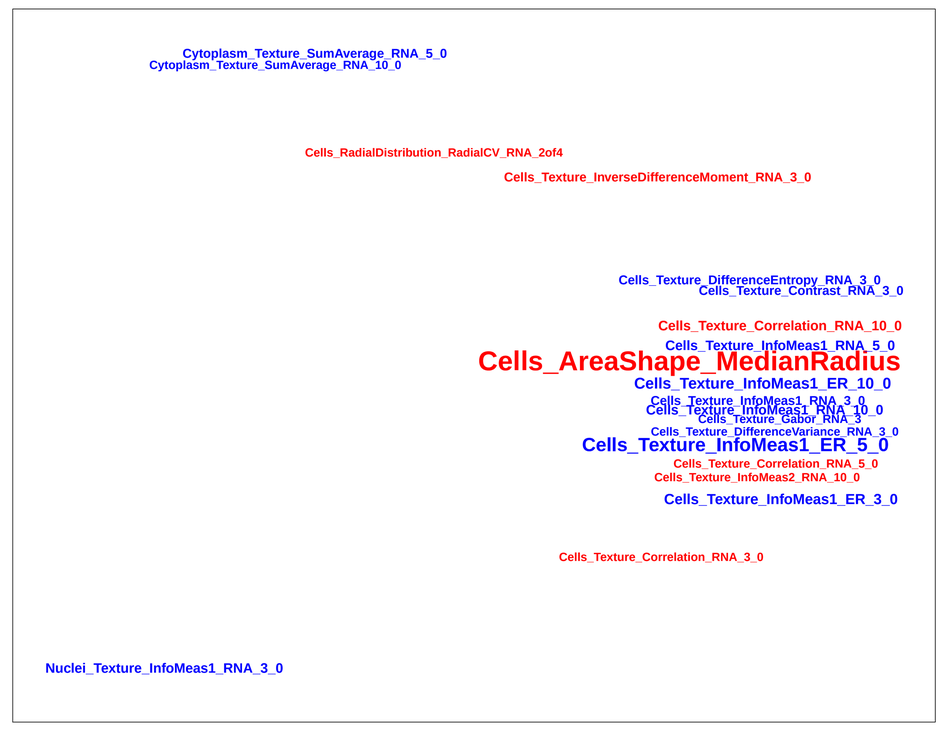
How similar is this gene to the other genes?

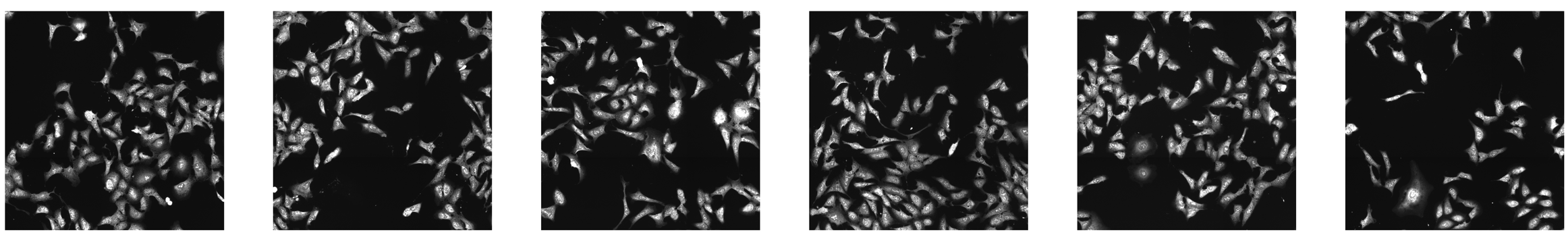


What groups of morphological features are distinguishing in the cluster relative to the untreated samples? (maximum of absolute m-score for the features belonging to the same category; m-score defined as median of a feature z-score across genes in the cluster) Black means no feature is available in the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

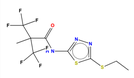
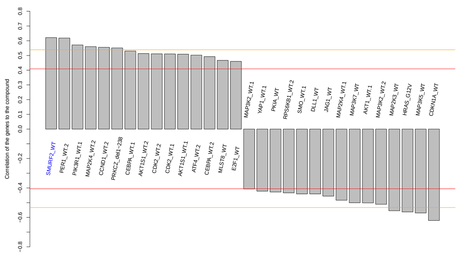
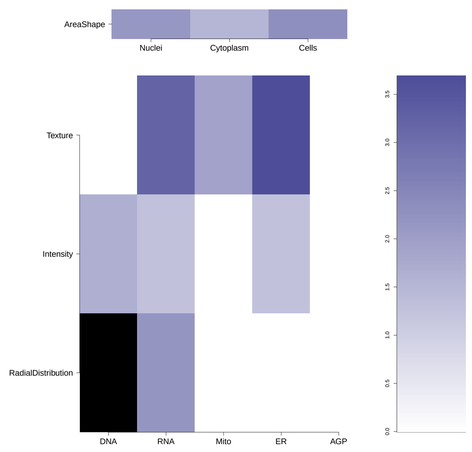
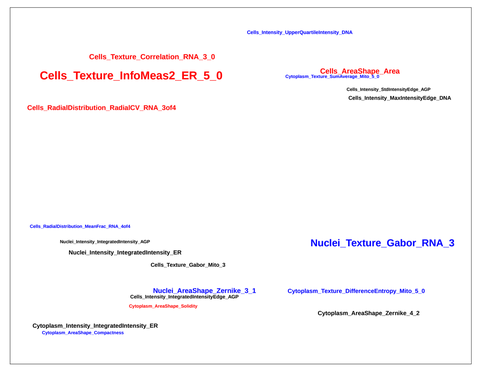
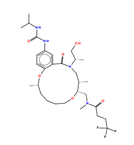
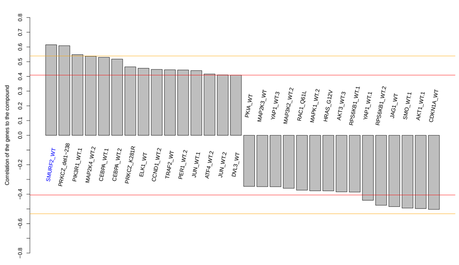
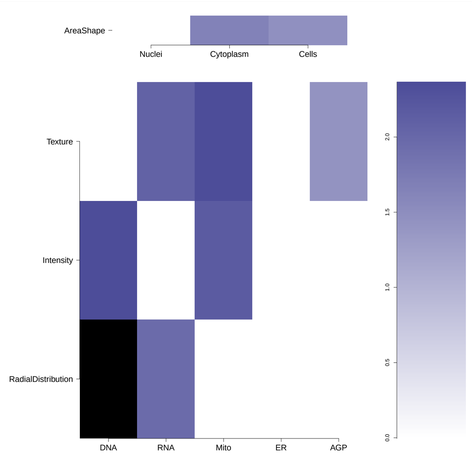
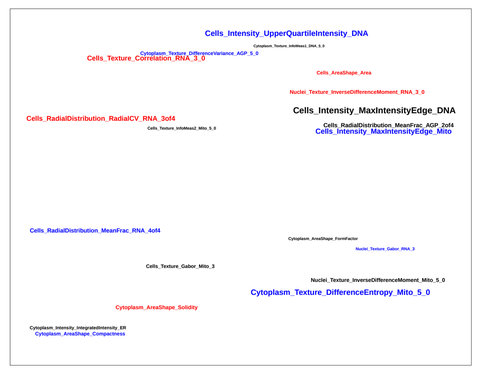
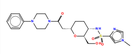
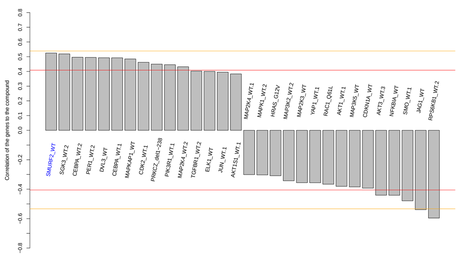
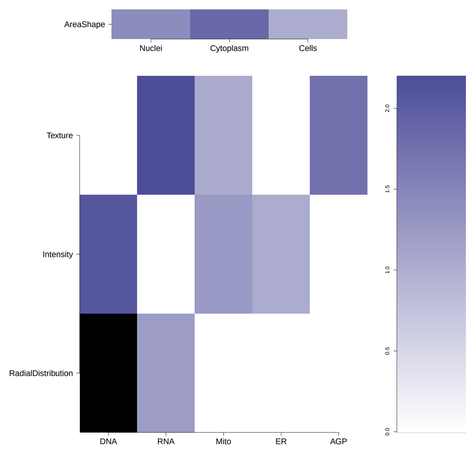
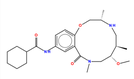
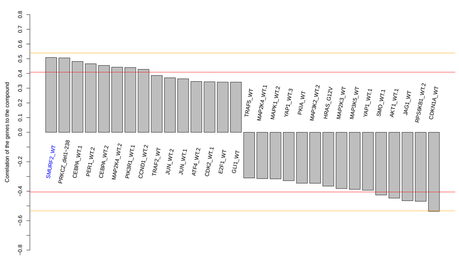
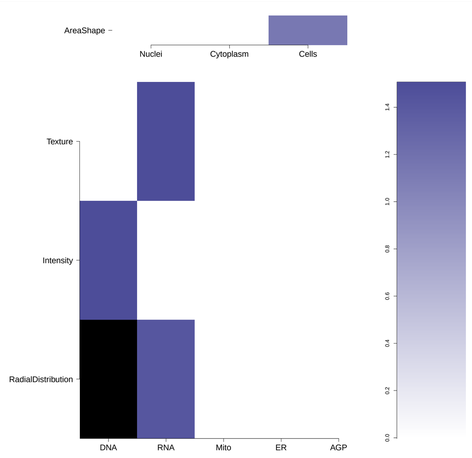
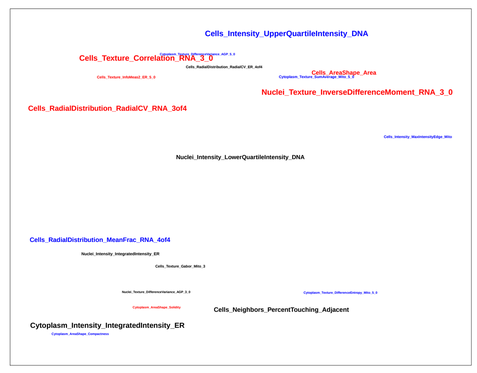
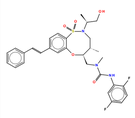
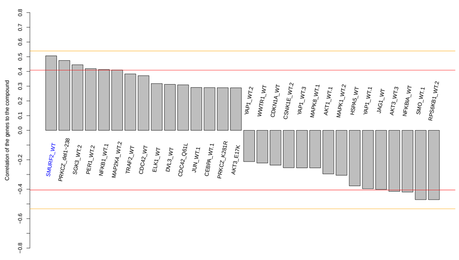
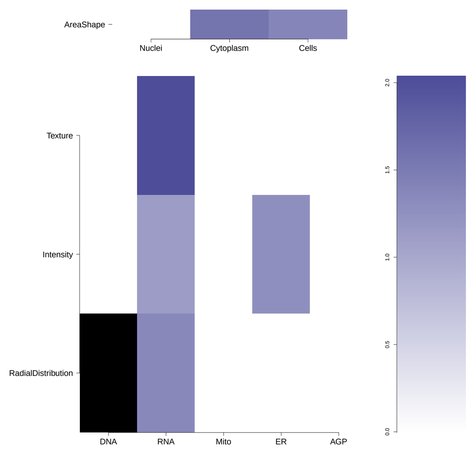
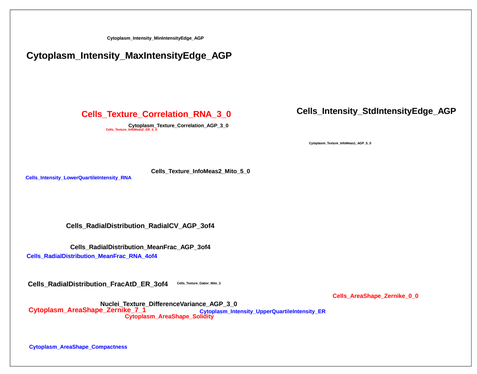
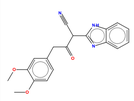
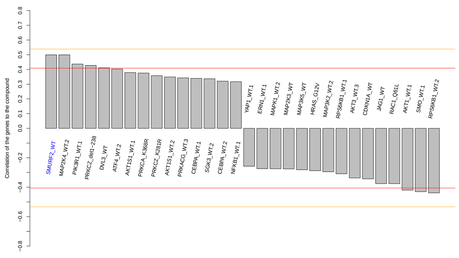
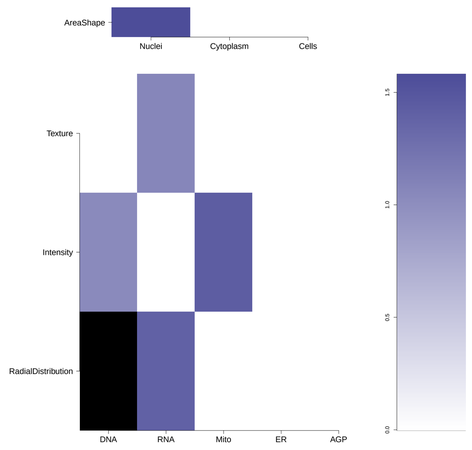


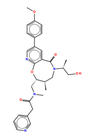
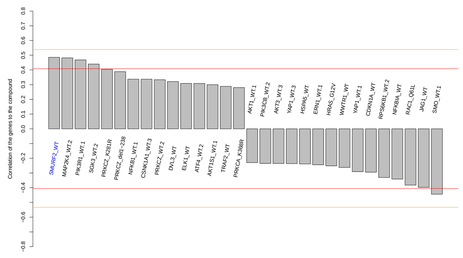
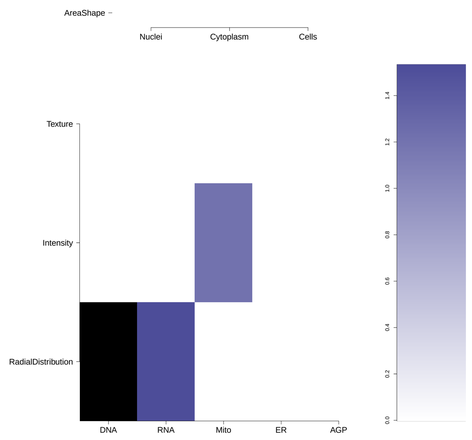
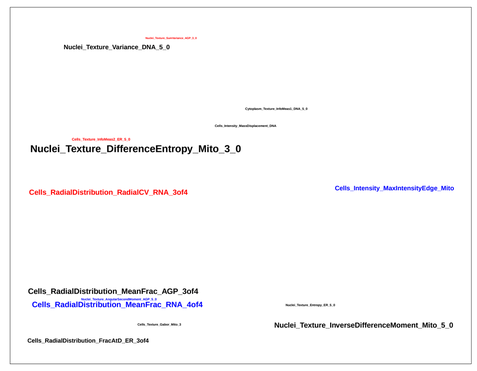
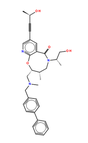
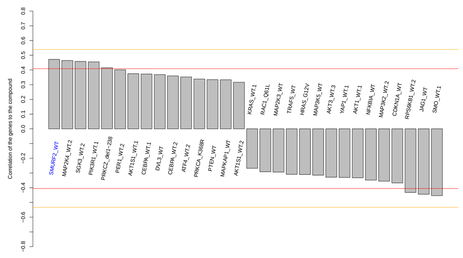
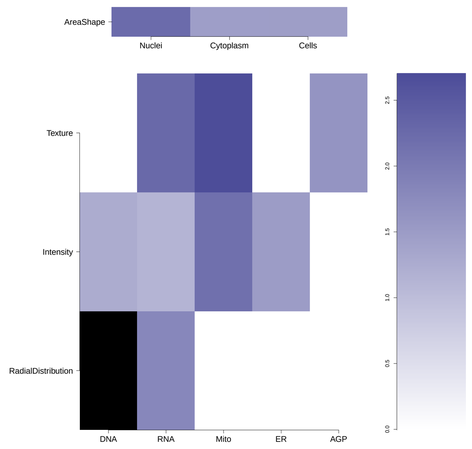
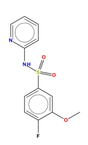
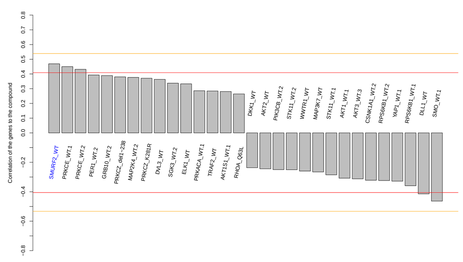
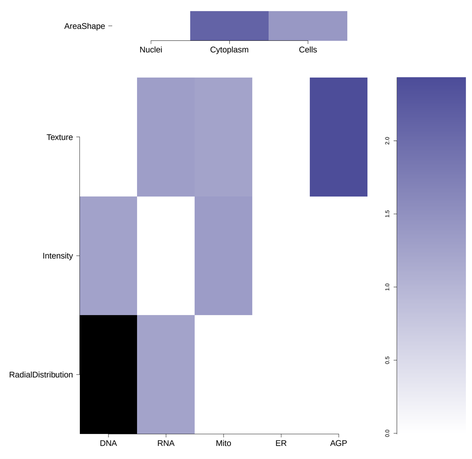
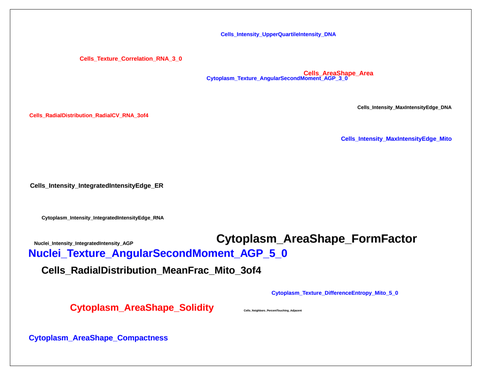
Which individual morphological features are distinguishing in the gene relative to the untreated samples? Blue/Red means the feature has a positive/negative z-score. Size is proportional to the z-score value.

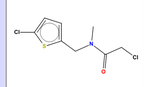
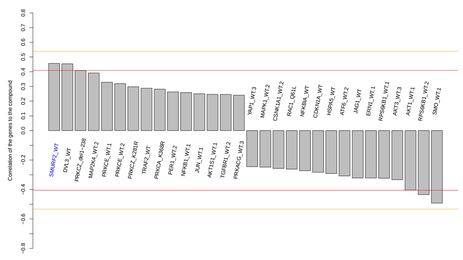
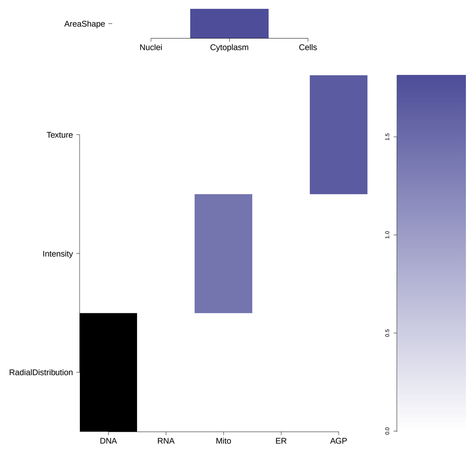
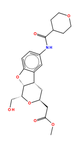
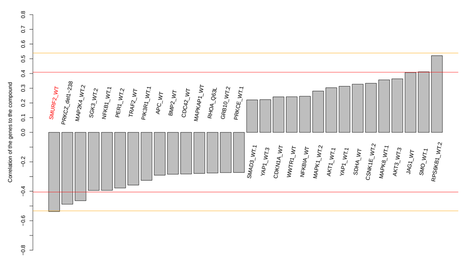
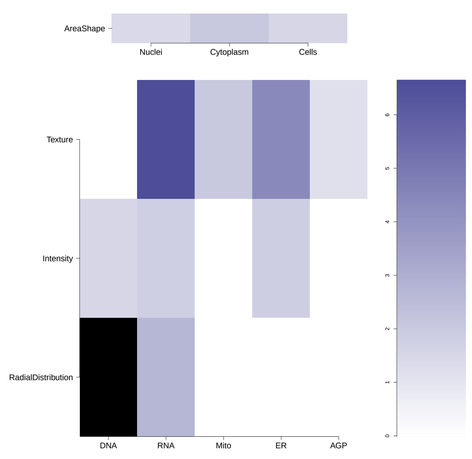
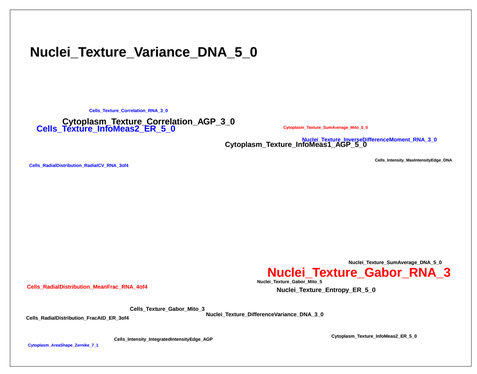


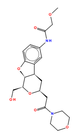
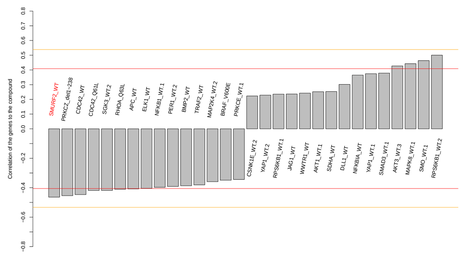
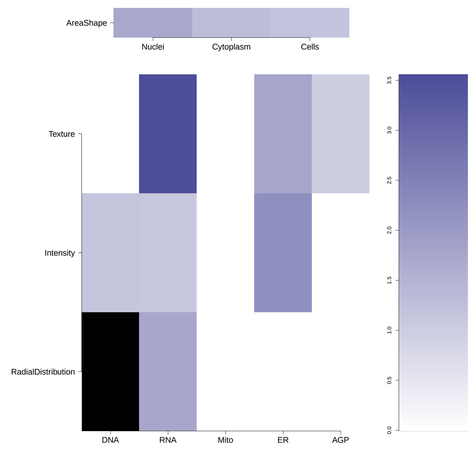
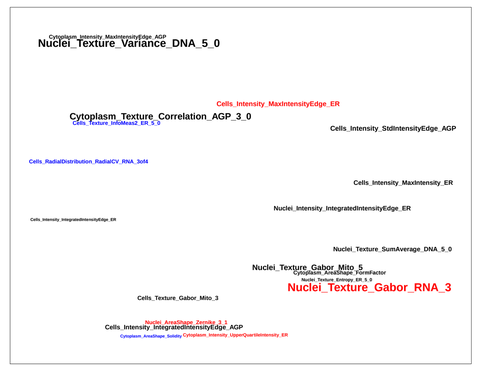
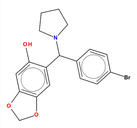
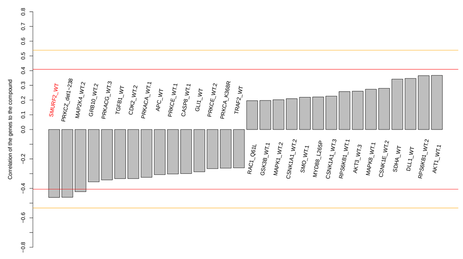
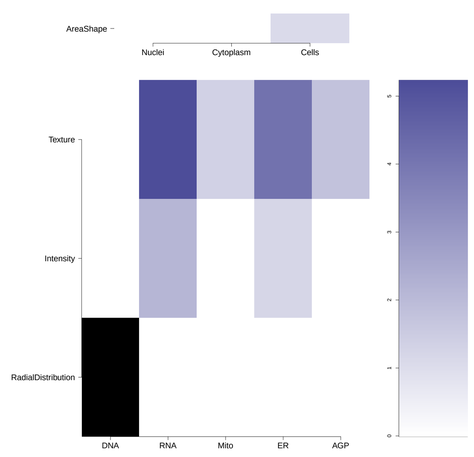
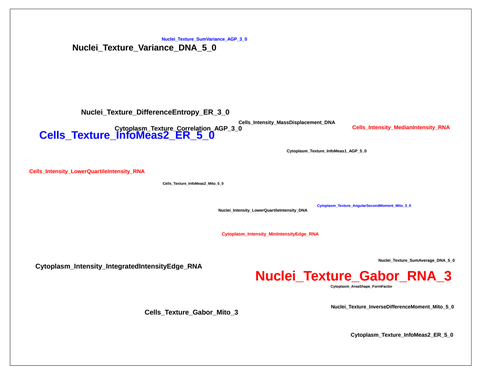
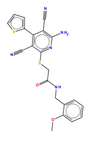
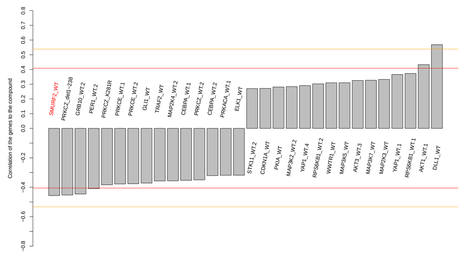
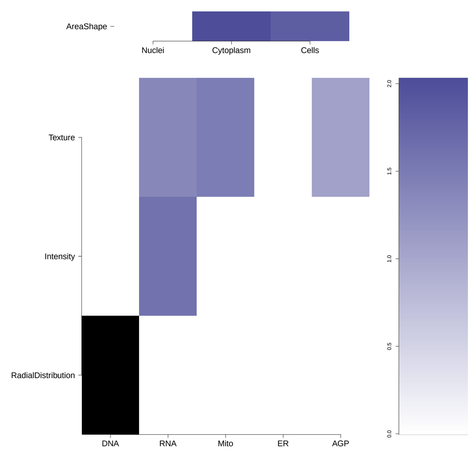
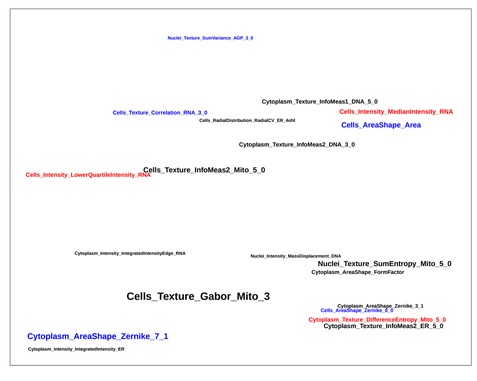


Compound IDs and common names (where available); blue/red colored box means the matching compound is positively/negatively correlated with the cluster	Chemical structure	Mean pairwise replicates correlation of the compound signature (95th DMSO replicate correlation is 0.51)	Correlation between compound 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-K22606571-001-05-1 ZINC02277811 AC1LCZ96 MLS000079219 HMS2426D20 ZINC2277811 STK759250 SMR000035371 ST049350 PubChem CID : 658691		NA (in 1 replicates)	0.62	NA				Total number of assays tested in: 760. Active in the following assays: • Human A549 Lung Tumor Cell Growth Inhibition Assay (AID 371) • CYP2C9 Assay (AID 777) • qHTS Assay for Identification of Small Molecule Antagonists for Hypoxia Response Element Signaling Pathway (AID 915) • Multiplexed high-throughput screen for small molecule regulators of RGS family protein interactions, specifically RGS16-Galphao. (AID 1441) • Multiplexed high-throughput screen for small molecule regulators of RGS family protein interactions. (AID 1504) • qHTS Multiplex Assay to Identify Dual Action Probes in a Cell Model of Huntington: Aggregate Formation (GFP) (AID 1688) • Primary cell-based screen for identification of compounds that inhibit the Choline Transporter (CHT) (AID 488975) • Confirmatory screen for compounds that inhibit the Choline Transporter (CHT) (AID 493221) • Nrf2 qHTS screen for inhibitors (AID 504444) • Dose responses of compounds that inhibit the Choline Transporter (CHT) - 5 point CRC (AID 504840) • Dose responses of compounds that inhibit the Choline Transporter (CHT) - 10 point CRC (AID 588401) • A Quantitative High throughput Screen to Identify Chemical Modulators of PINK1 Expression (AID 624263) • qHTS for Antagonists of gsp, the Etiologic Mutation Responsible for Fibrous Dysplasia/McCune-Albright Syndrome: qHTS (AID 624288) • Counterscreen of compound fluorescence effects on High-throughput multiplex microsphere screening for inhibitors of toxin protease (AID 624483) • 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) • Confirmed inhibitors of the Choline Transporter (CHT) (AID 1053196)
BRD-K12559526-001-01-9 PubChem CID : 44494504		0.72 (in 4 replicates)	0.61	NA				Total number of assays tested in: 43.
BRD-K14896981-001-01-1 PubCID : 54641286		NA (in 1 replicates)	0.52	NA				Total number of assays tested in: 40.
BRD-K75037209-001-01-4 PubCID : 54632498		0.53 (in 4 replicates)	0.51	0.948				Total number of assays tested in: 35.
BRD-K57075511-001-01-9 PubCID : 54619425		0.67 (in 4 replicates)	0.51	0.087				Total number of assays tested in: 21.
BRD-A20463452-001-05-5 SMR000105694 MLS000109755 AC1NSJ88 MLS002540323 HMS2277D19 ZINC5578862 STK094158 STL043492 ZINC05578862 BAS 01816577 6062-72-2 PubCID : 5310613		0.59 (in 4 replicates)	0.50	0.024				Total number of assays tested in: 772. Active in the following assays: • Luminescent assay for HTS discovery of chemical activators of placental alkaline phosphatase (AID 696) • CYP2C9 Assay (AID 777) • qHTS for inhibitors of ROR gamma transcriptional activity (AID 2551) • Heat Shock Factor-1 (HSF-1) Measured in Cell-Based System Using Plate Reader - 2038-01_Activator_SinglePoint_HTS_Activity (AID 504408)

BRD-K64418159-001-01-9 PubChem CID : 54619450		0.76 (in 4 replicates)	0.49	0.945				Total number of assays tested in: 38.
BRD-K23427405-001-01-2 PubChem CID : 54619550		0.51 (in 4 replicates)	0.47	0.729				Total number of assays tested in: 23.
BRD-K68733377-001-05-4 MLS000531867 AC1M2N06 HMS2435J10 ZINC4247809 ZINC04247809 CCG-121752 SMR000136846 ST50778870 T5969423 PubChem CID : 2147476		0.64 (in 4 replicates)	0.47	0.917				Total number of assays tested in: 679. Active in the following assays: • HTS Assay for Activators of Cytochrome P450 2A9 (AID 1024) • Phenotypic HTS multiplex for antifungal efflux pump inhibitors (AID 485275)

BRD-K18667904-001-07-3 ZINC03348993 AC1M7EJ3 AC1Q3XC9 MLS000772227 CTK6H4902 HMS2717A21 ZINC3348993 NE38398 SMR000344372 EN300-11826 T5320461 PubChem CID : 2465947		NA (in 1 replicates)	0.46	NA				Total number of assays tested in: 647. Active in the following assays: • qHTS Assay for Inhibitors of Aldehyde Dehydrogenase 1 (ALDH1A1) (AID 1030) • Leishmania major promastigote HTS (AID 1063) • HCS to Identify Inhibitors of Dynein Mediated Cargo Transport on Microtubules. (AID 1381) • uHTS luminescence assay for the identification of compounds that inhibit NOD1 (AID 1578) • Luminescence Cell-Based/Microorganism Primary HTS to Identify Inhibitors of T.Cruzi Replication (AID 1885) • Luminescence Cell-Based Dose Response HTS to Identify Compounds Cytotoxic to BJ-TERT RAS-Independent Fibroblast (AID 1933) • Luminescence Cell-Based Dose Response HTS to Identify Compounds Cytotoxic to DRD Non-Viral Oncogenic Fibroblast (AID 1934) • Fluorescence polarization-based counterscreen for RBBP9 inhibitors: primary biochemical high throughput screening assay to identify inhibitors of the oxidoreductase glutathione S-transferase omega 1(GSTO1). (AID 1974) • Fluorescence polarization-based biochemical high throughput confirmation assay for inhibitors of the oxidoreductase glutathione S-transferase omega 1(GSTO1). (AID 2176) • Fluorescence Cell-Free Homogenous Primary HTS to Identify Inhibitors of RecA Intein Splicing Activity (AID 2221) • qHTS for inhibitors of ROR gamma transcriptional activity (AID 2551) • HTS for small molecule inhibitors of CHOP to regulate the unfolded protein response to ER stress (AID 2732) • 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) • A Cell Based Secondary Assay To Explore Cytotoxicity of Compounds that Inhibit Mycobacterium Tuberculosis (AID 435019) • 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 Screening Assay used to Identify Novel Compounds that Inhibit Mycobacterium Tuberculosis in 7H9 Media (AID 449762) • A High Throughput Confirmatory Assay used to Identify Novel Compounds that Inhibit Mycobacterium Tuberculosis in the absence of Glycerol (AID 449764) • HCS to Identify Inhibitors of Dynein Mediated Cargo Transport on Microtubules: Confirmation Assay (AID 463116) • Concentration-Response Confirmation Assays for HCS to Identify Inhibitors of Dynein Mediated Cargo Transport on Microtubules (AID 463136) • uHTS for identification of Inhibitors of Mdm2/MdmX interaction in luminescent format. (AID 485346) • qHTS Assay for the Inhibitors of Schistosoma Mansoni Peroxiredoxins (AID 485364) • 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 qHTS for delayed death inhibitors of the malarial parasite plastid, 96 hour incubation (AID 504834) • qHTS for Inhibitors of binding or entry into cells for Lassa Virus (AID 540256) • 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_Dose_CherryPick_Activity (AID 540271) • qHTS for Inhibitors of TGF-b (AID 588855) • Mammalian cell toxicity counterscreen to identify toxic HSP40 inhibitor compounds in NIH3T3 cells Measured in Cell-Based System Using Plate Reader - 2120-03_Inhibitor_Dose_CherryPick_Activity_Set2 (AID 624265) • uHTS identification of small molecule Triacylglycerol inhbitors in a fluoresence assay (AID 651582) • qHTS for Inhibitors of ATXN expression (AID 651635) • Cell-based secondary assay to test the inhibitory activity of small molecule on Plasmodium flaciparum (HB3 strain) survival in red blood cells Measured in Cell-Based System Using Plate Reader - 2120-06_Inhibitor_Dose_CherryPick_Activity (AID 652041) • Cell-based secondary assay to test the inhibitory activity of small molecule on Plasmodium flaciparum (3D7 strain) survival in red blood cells Measured in Cell-Based System Using Plate Reader - 2120-05_Inhibitor_Dose_CherryPick_Activity (AID 652047) • qHTS of TDP-43 Inhibitors (AID 652104) • qHTS for induction of synthetic lethality in tumor cells producing 2HG: qHTS for the HT-1080-NT fibrosarcoma cell line (AID 686970) • qHTS for induction of synthetic lethality in tumor cells producing 2HG: qHTS for the HT-1080-IDH1KD cell line (AID 686971) • 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 Inflammasome Signaling: IL-1-beta AlphaLISA Primary Screen (AID 743279) • High Throughput Screening for Foot and Mouth Disease Virus Antivirals (AID 1159524)
BRD-K28223745-001-01-9 PubChem CID : 54646012		NA (in 1 replicates)	-0.54	0.850				Total number of assays tested in: 40.

BRD-K33451389-001-01-0 PubChem CID : 54645962		NA (in 1 replicates)	-0.46	0.083				Total number of assays tested in: 40.
BRD-A93259806-001-03-7 MLS000736356 SMR000338306 AC1MWF07 BDBM48860 HMS2626G16 STK647200 4T-0329 PubChem CID : 3723045		NA (in 1 replicates)	-0.46	NA				Total number of assays tested in: 550. Active in the following assays: • uHTS for Small Molecule Inhibitors of Eukaryotic Translation Initiation (AID 782) • uHTS of Mcl-1/Bid interaction inhibitors (AID 1021) • uHTS of Mcl-1/Noxa interaction inhibitors (AID 1022) • qHTS Assay for Inhibitors of Aldehyde Dehydrogenase 1 (ALDH1A1) (AID 1030) • Leishmania major promastigote HTS (AID 1063) • HTS identification of compounds inhibiting phosphomannose isomerase (PMI) via a fluorescence intensity assay using a high concentration of mannose 6-phosphate (AID 1220) • qHTS for Inhibitors of Tau Fibril Formation, Thioflavin T Binding (AID 1460) • qHTS Assay for Inhibitors of Bacillus subtilis Sfp phosphopantetheinyl transferase (PPTase) (AID 1490) • Colorimetric Assay for Inhibitors for NALP1 (AID 2071) • 384-well Z-Lyte format Hck-Nef inhibitor HTS run at the PMLSC (AID 463187) • qHTS Assay for the Inhibitors of Schistosoma Mansoni Peroxiredoxins (AID 485364) • qHTS Assay for Inhibitors of Histone Lysine Methyltransferase G9a (AID 504332) • qHTS Assay for Inhibitors of BAZ2B (AID 504333) • qHTS Assay for Inhibitors of JMJD2A-Tudor Domain (AID 504339) • Assay for Inhibitors of the beta-Arrestin-Adaptor Protein 2 Interaction That Mediate GPCR Degradation and Recycling (AID 504490) • Inhibitors of the vitamin D receptor (VDR): qHTS (AID 504847) • HTS for Inhibitors of HP1-beta Chromodomain Interactions with Methylated Histone Tails (AID 540317) • qHTS Assay for Inhibitors of Mammalian Selenoprotein Thioredoxin Reductase 1 (TrxR1): qHTS (AID 588453) • uHTS identification of cystic fibrosis induced NFkb Inhibitors in a fluoresence assay (AID 588850) • qHTS for Inhibitors of TGF-b: Cytotox Counterscreen (AID 588856) • qHTS for Inhibitors of the vitamin D receptor (VDR): Hit Validation in Primary Screen (AID 602199) • qHTS for Inhibitors of the vitamin D receptor (VDR): Hit Validation using a Fluorescein Assay (AID 602200) • qHTS for Inhibitors of WRN Helicase (AID 651768) • 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) • qHTS for Inhibitors of Inflammasome Signaling: IL-1-beta AlphaLISA Primary Screen (AID 743279) • Primary Screen Inhibitors of CD40 Signaling in BL2 Cells Measured in Cell-Based System Using Plate Reader - 7124-01_Inhibitor_SinglePoint_HTS_Activity (AID 1053188)
BRD-K54419754-001-06-7 SMR000147487 MLS000555970 AC1LZ4CJ BDBM43011 HMS2342A17 STK547180 ZINC20064565 PubChem CID : 1941298		NA (in 1 replicates)	-0.46	NA				Total number of assays tested in: 683. Active in the following assays: • Primary biochemical High Throughput Screening assay for agonists of the steroid receptor coactivator 3 (SRC-3) recruitment by the peroxisome proliferator-activated receptor gamma (PPARgamma) (AID 731) • qHTS Assay for Identifying the Cell-Membrane Permeable IMPase Inhibitors: Potentiation with Lithium (AID 1457) • qHTS Assay for Inhibitors Targeting the Menin-MLL Interaction in MLL Related Leukemias: Competition With Texas Red Labeled MLL-derived Mutant Peptide (AID 1768) • Activator for delta FosB/delta FosB homodimer Measured in Biochemical System Using Plate Reader - 2072-01_Activator_SinglePoint_HTS_Activity (AID 493131) • qHTS for antagonists of the Thyroid Stimulation Hormone Receptor: Hit Validation in Primary Screen (AID 602292) • Fluorescence polarization-based biochemical primary high throughput screening assay to identify inhibitors of ADP-ribosylation factor GTPase activating protein 1 (ARFGAP1) (AID 651572) • Fluorescence polarization-based biochemical high throughput confirmation assay for inhibitors of ADP-ribosylation factor GTPase activating protein 1 (ARFGAP1) (AID 651608)