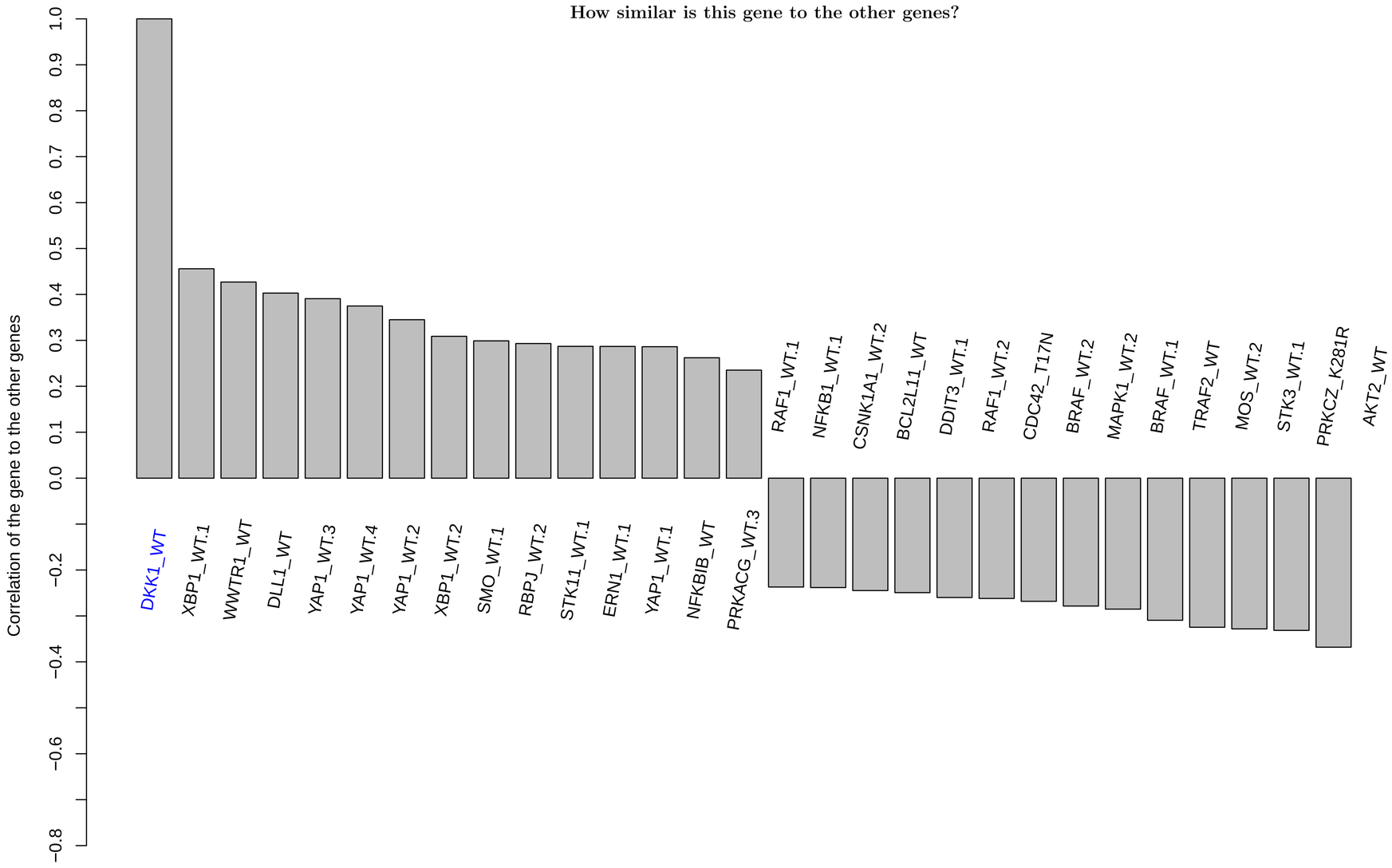
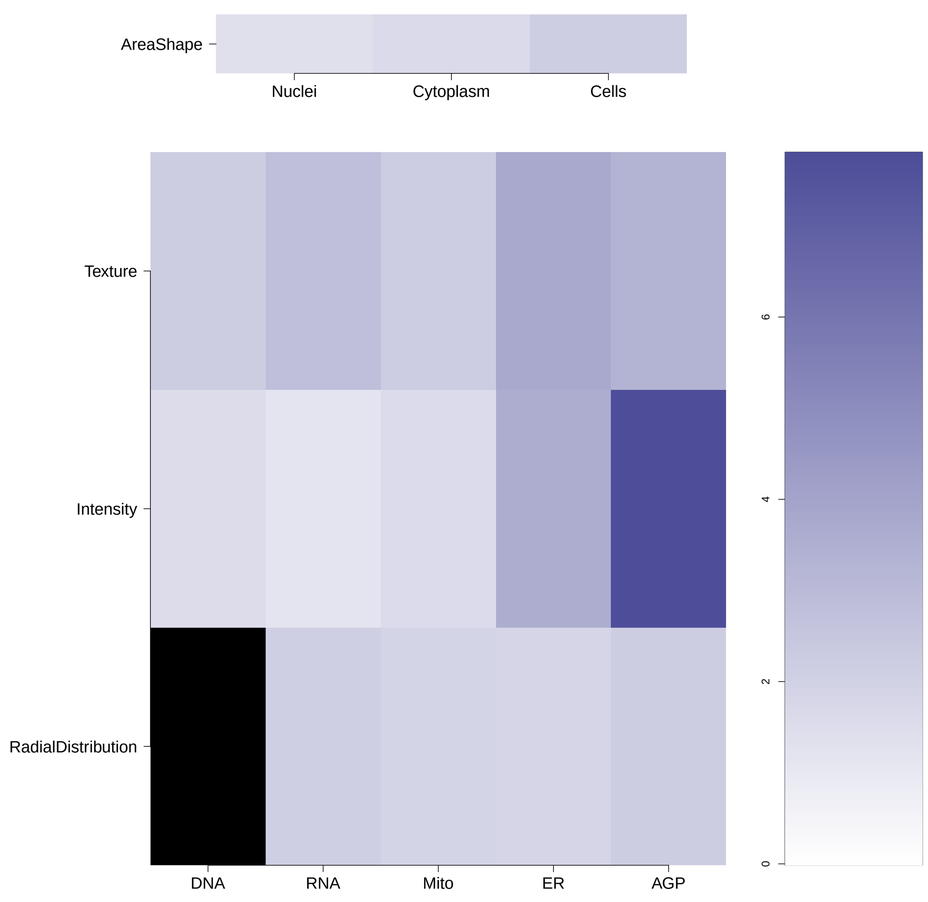
CONFIDENTIAL, contact the Imaging Platform to collaborate on the findings herein

DKK1_WT - in Canonical WNT

How similar is this gene to the other genes?



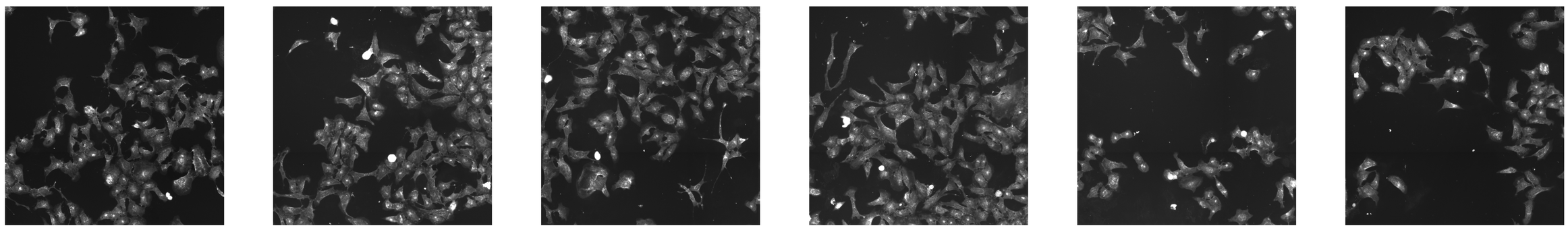
What groups of morphological features are distinguishing in the cluster relative to the untreated samples? (maximum of absolute m-score for the features belonging to the same category; m-score defined as median of a feature z-score across genes in the cluster) Black means no feature is available in the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



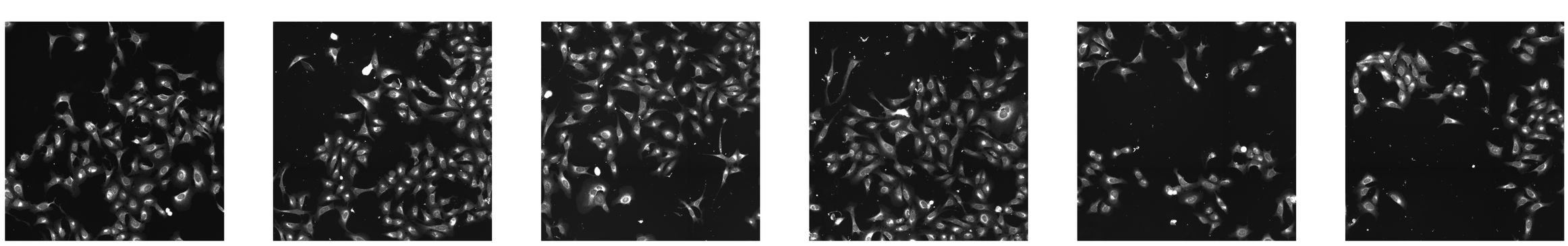
Which individual morphological features are distinguishing in the gene relative to the untreated samples? Blue/Red means the feature has a positive/negative z-score. Size is proportional to the z-score value.

Empty | DKK1_WT (41744) | DKK1_WT (41755) | DKK1_WT (41756) | DKK1_WT (41757) | DKK1_WT (41754)

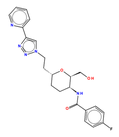
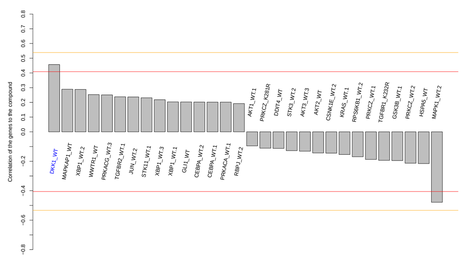
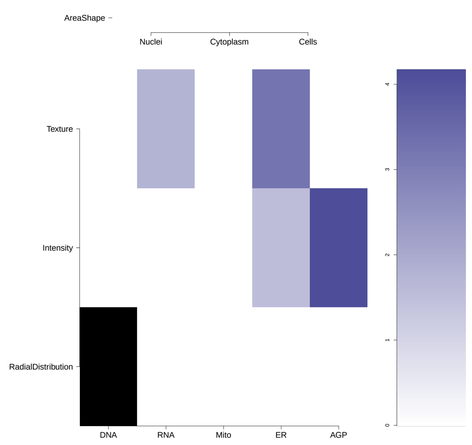
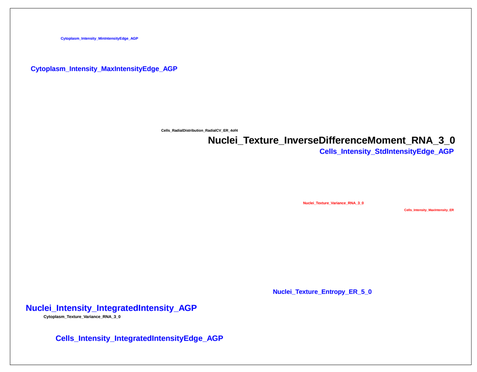
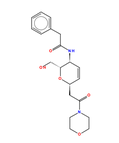
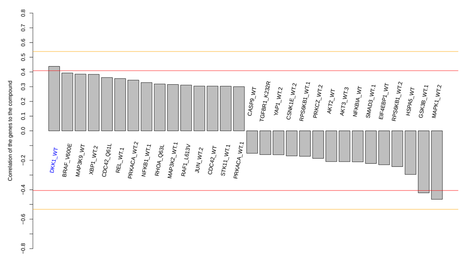
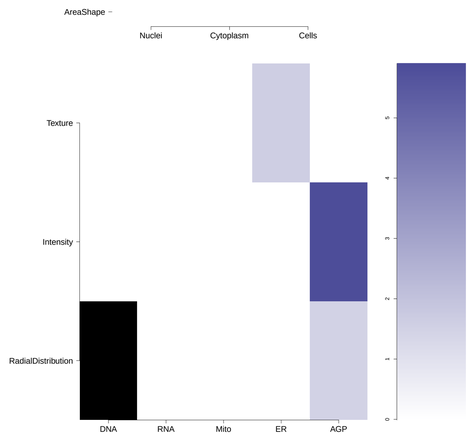
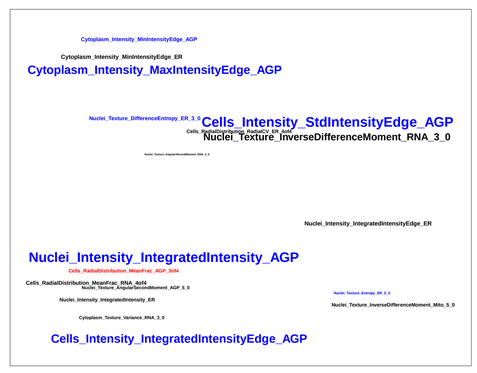
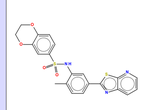
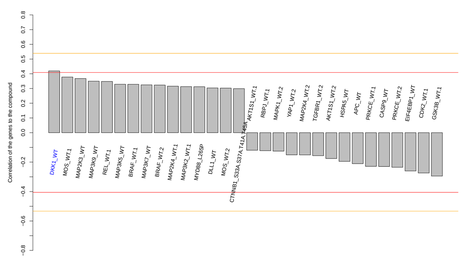
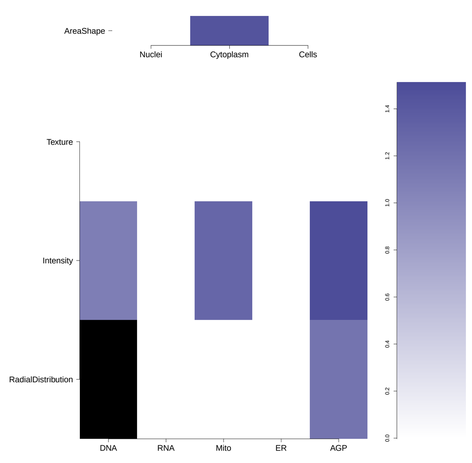
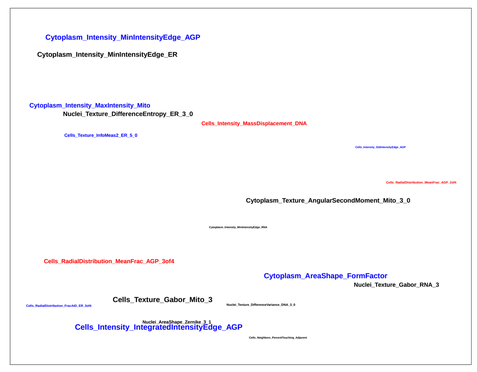
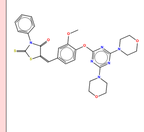
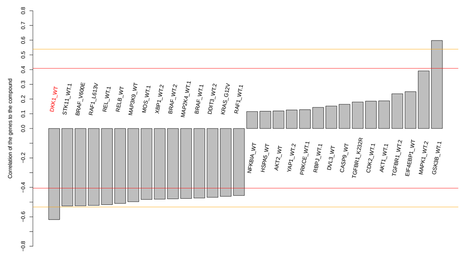
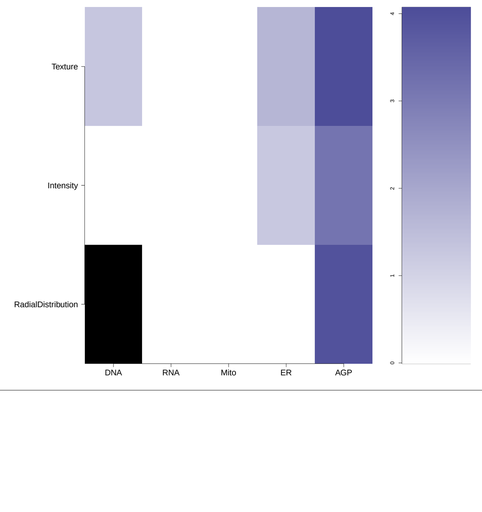
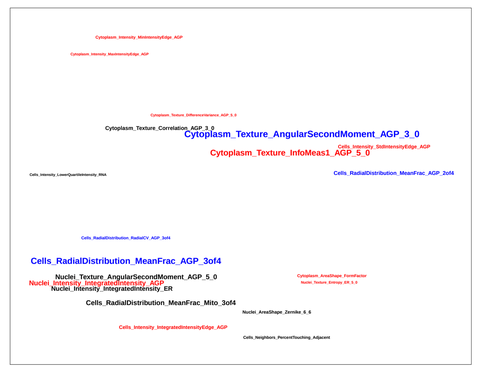
AGP

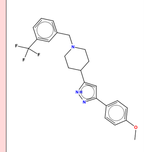
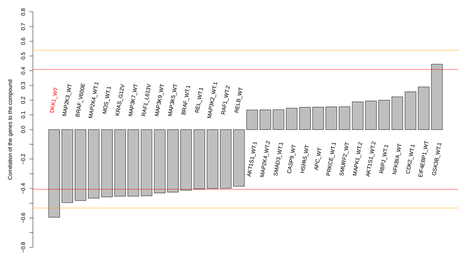
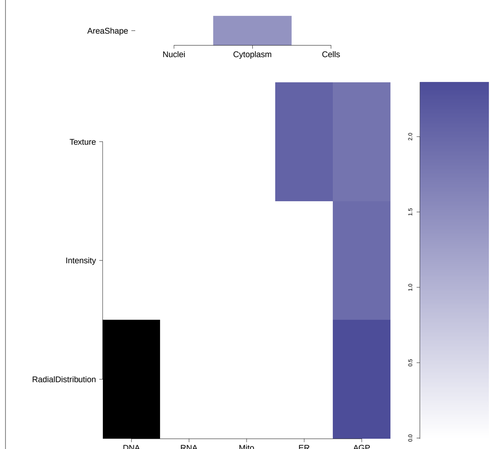
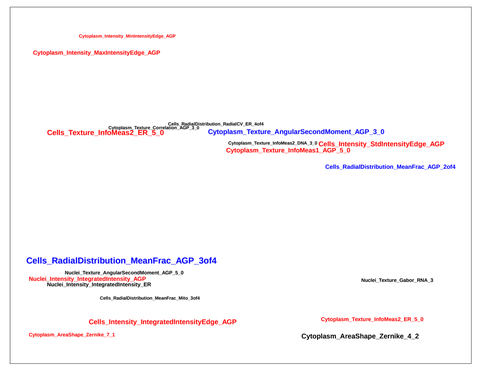
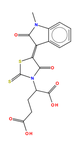
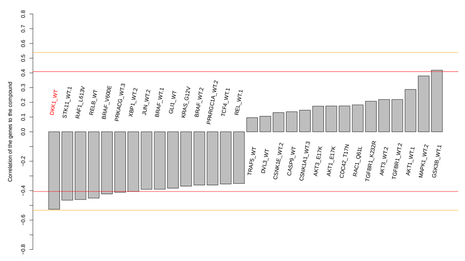
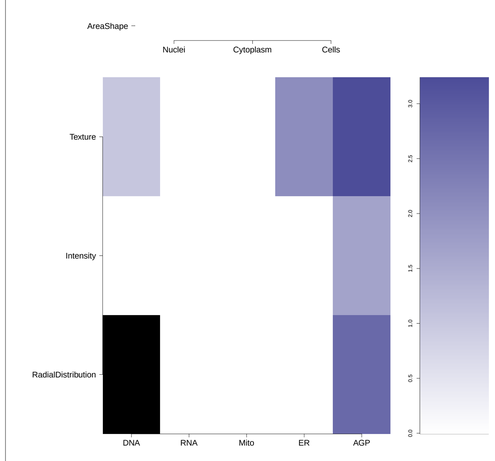
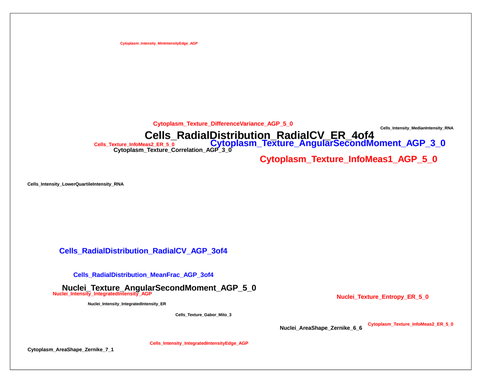
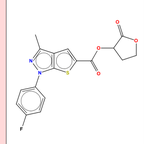
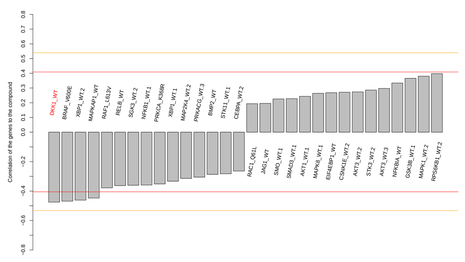
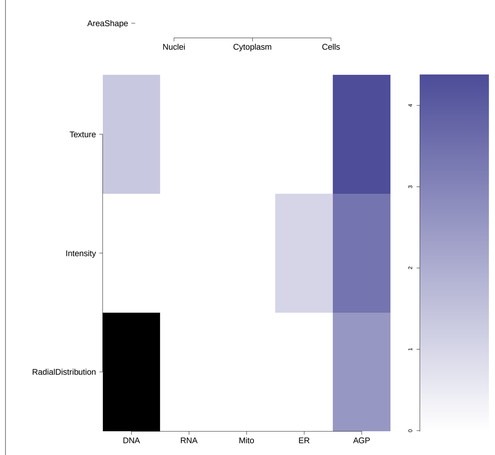
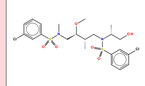
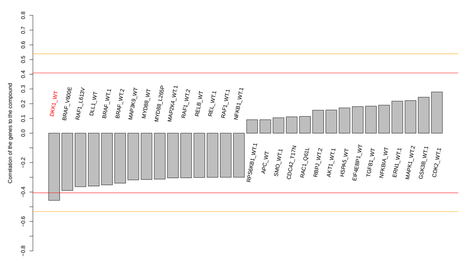
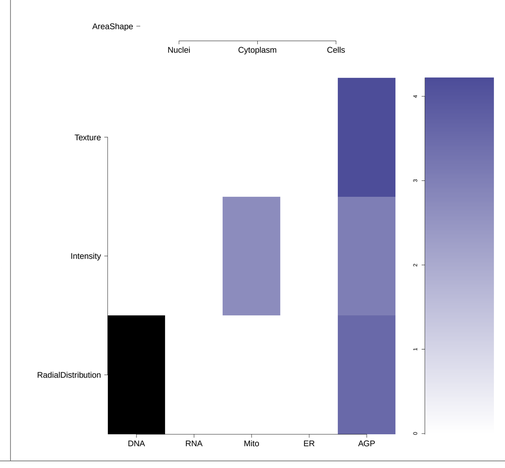
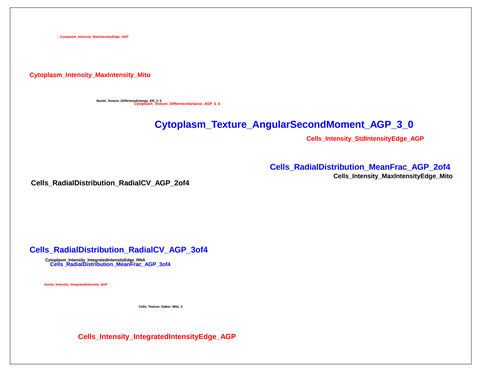


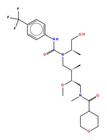
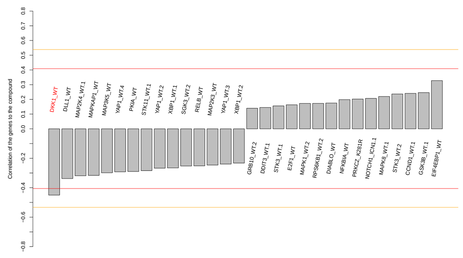
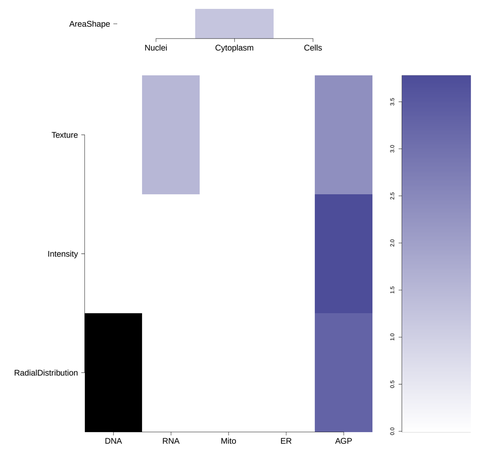
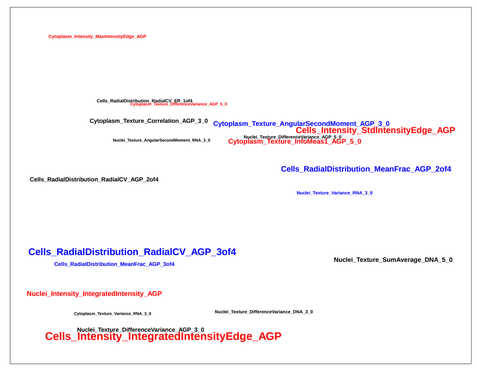
ER



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-K24743998-001-01-4 PubChem CID : 54640606		0.61 (in 4 replicates)	0.46	0.262				Total number of assays tested in: 41. Active in the following assays: • HTS for the detection of C. neoformans cell lysis via adenylate kinase (AK) release Measured in Microorganism System Using Plate Reader - 2162-01_Inhibitor_SinglePoint_HTS_Activity (AID 651654)
BRD-K88806312-001-01-1 PubChem CID : 54639816		0.77 (in 4 replicates)	0.44	0.235				Total number of assays tested in: 47. Active in the following assays: • HTS for the detection of C. neoformans cell lysis via adenylate kinase (AK) release Measured in Microorganism System Using Plate Reader - 2162-01_Inhibitor_SinglePoint_HTS_Activity (AID 651654) • HTS for the detection of C. neoformans cell lysis via adenylate kinase (AK) release Measured in Microorganism System Using Plate Reader - 2162-01_Inhibitor_Dose_CherryPick_Activity (AID 687000)
BRD-K77658510-001-05-0 F0695-0261 MLS000529704 HMS2244N18 ZINC8670412 ZINC08670412 SMR000127213 PubChem CID : 9550275		0.51 (in 4 replicates)	0.42	NA				Total number of assays tested in: 702. Active in the following assays: • Human H69AR Lung Tumor Cell Growth Inhibition Assay - 86K Screen (AID 598) • Screening for Modulators of Post-Golgi Transport, Control Strain (AID 738) • Modulators of Post-Golgi Transport (AID 739) • CYP2C9 Assay (AID 777) • Screen for Chemicals that Inhibit the RAM Network (AID 868) • Cycloheximide Counterscreen for Small Molecule Inhibitors of Shiga Toxin (AID 2314) • A qHTS for Small Molecule Inhibitors of Shiga Toxin (AID 2315) • High Content Assay for Compounds that inhibit the Assembly of the Perinucleolar Compartment (AID 2417) • Luminescence Cell-Based Primary HTS to Identify Inhibitors of Cancer Stem Cells (AID 2717) • 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) • Anti-Malarial Hsp90 Inhibitors Measured in Microorganism System Using Plate Reader - 2121-01_Inhibitor_SinglePoint_HTS_Activity_Set2 (AID 504621) • Anti-Malarial Hsp90 Inhibitors Measured in Microorganism System Using Plate Reader - 2121-01_Inhibitor_Dose_CherryPick_Activity (AID 540268) • HsHsp90 Counterscreen Measured in Microorganism System Using Plate Reader - 2121-02_Inhibitor_Dose_CherryPick_Activity (AID 540270) • Fluorescence-based cell-based primary high throughput screening assay to identify antagonists of the human trace amine associated receptor 1 (TAAR1) (AID 624466) • Counterscreen for antagonists of the human trace amine associated receptor 1 (hTAAR1): Fluorescence-based cell-based high throughput screening assay to identify nonselective antagonists (AID 651780)
BRD-K49998974-001-05-4 AC1NT3BB MLS000700033 HMS2583K11 ZINC8684194 CCG-13239 SMR000228443 5839-29-2 PubChem CID : 5343920		NA (in 1 replicates)	-0.62	NA				Total number of assays tested in: 658. Active in the following assays: • Screen for Chemicals that Inhibit the RAM Network (AID 868) • qHTS Assay for Inhibitors of Aldehyde Dehydrogenase 1 (ALDH1A1) (AID 1030) • uHTS identification of small molecule inhibitors of the thioesterase domain of fatty acid synthase via a fluorescence intensity assay (AID 602261)

BRD-K71520299-001-08-9 MLS000755612 SMR000337275 9X-0018 BDBM57926 HMS2612P09 ZINC4025203 PubChem CID : 16195261		NA (in 1 replicates)	-0.60	NA				Total number of assays tested in: 644. Active in the following assays: • Leishmania major promastigote HTS (AID 1063) • Luminescence Cell-Based/Microorganism Primary HTS to Identify Inhibitors of T.Cruzi Replication (AID 1885) • 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) • Fluorescence Cell-Based Primary HTS of C.albicans growth in the presence of Fluconazole and compound (AID 1979) • Luminescence Cell-Based/Microorganism Dose Confirmation HTS to Identify Inhibitors of T.Cruzi Replication. (AID 2044) • Fluorescence Cell-Based Secondary Assay to Identify Inhibitors of Resistant C. albicans Growth in the Presence of Fluconazole (AID 2423) • HTS for small molecule inhibitors of CHOP to regulate the unfolded protein response to ER stress (AID 2732) • A Cell Based Secondary Assay To Explore Cytotoxicity of Compounds that Inhibit Mycobacterium Tuberculosis (AID 435019) • 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) • HTS Assay for Allosteric Antagonists of the Human D2 Dopamine Receptor: Primary Screen for Antagonists (AID 485344) • CHOP Confirmatory Screen (AID 504437) • qHTS for inhibitors of binding or entry into cells for Marburg Virus (AID 540276) • qHTS for Inhibitors of TGF-b: Cytotox Counterscreen (AID 588856) • qHTS of GLP-1 Receptor Inverse Agonists (Inhibition Mode) (AID 624417) • uHTS identification of small molecule antagonists of the EBI2 receptor via a luminescent beta-arrestin assay (AID 651636) • qHTS for induction of synthetic lethality in tumor cells producing 2HG: qHTS for the HT-1080-NT fibrosarcoma cell line (AID 686970) • 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) • qHTS for Inhibitors of Inflammasome Signaling: IL-1-beta AlphaLISA Primary Screen (AID 743279)
BRD-A76457511-001-06-7 SMR000054993 MLS000105064 ST50147276 AC1MCHQ5 MLS002539579 BDBM33622 HMS2327D11 BAS 00778190 T0502-2683 PubChem CID : 2769925		NA (in 1 replicates)	-0.53	NA				Total number of assays tested in: 774. Active in the following assays: • Kallikrein 5 1536 HTS (AID 873) • qHTS Assay for Inhibitors of HADH2 (Hydroxyacyl-Coenzyme A Dehydrogenase, Type II) (AID 886) • qHTS Assay for Inhibitors of HPGD (15-Hydroxyprostaglandin Dehydrogenase) (AID 894) • qHTS Assay for Inhibitors of Aldehyde Dehydrogenase 1 (ALDH1A1) (AID 1030) • Thrombin 1536 HTS (AID 1046) • Kallikrein 5 1536 HTS Dose Response Confirmation (AID 1431) • qHTS Assay for Inhibitors of Human Jumonji Domain Containing 2E (JMJD2E) (AID 2147) • FRET-based cell-based primary high throughput screening assay to identify antagonists of the orexin 1 receptor (OX1R; HCRTR1) (AID 485270) • Homogeneous Time Resolved Fluorescence (HTRF)-based cell-based high throughput confirmation assay for antagonists of the orexin 1 receptor (OX1R; HCRTR1) (AID 492964)
BRD-A38078247-001-05-1 MLS000058712 SMR000067217 T5257781 AC1MHB74 MLS002633617 BDBM51534 HMS2328H17 PubChem CID : 2999178		NA (in 1 replicates)	-0.48	NA				Total number of assays tested in: 778. 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) • Rml C and D inhibition 384-well mixture HTS (AID 1532) • Rml C and D fluorescent artifact dose-response confirmation (AID 1696) • Counterscreen for PME1 inhibitors: fluorescence polarization-based primary biochemical high throughput screening assay to identify inhibitors of lysophospholipase 2 (LYPLA2). (AID 2177) • Counterscreen for PME1 inhibitors: fluorescence polarization-based biochemical high throughput confirmation assay to identify inhibitors of lysophospholipase 2 (LYPLA2). (AID 2232) • Fluorescence-based biochemical primary high throughput screening assay to identify inhibitors of the fructose-bisphosphate aldolase (FBA) of M. tuberculosis (AID 588726) • Fluorescence-based biochemical high throughput confirmation assay for inhibitors of the fructose-bisphosphate aldolase (FBA) of M. tuberculosis (AID 651616) • Fluorescence Intensity-based biochemical primary high throughput screening assay to identify activators of kallikrein-7 (K7) zymogen (AID 652039) • Counterscreen for inhibitors of the fructose-bisphosphate aldolase (FBA) of M. tuberculosis: Fluroescence-based biochemical high throughput Glycerophosphate Dehydrogenase-Triosephosphate Isomerase (GDH-TPI) assay to identify assay artifacts (AID 652141) • Fluorescence Intensity-based biochemical primary high throughput confirmation assay to identify activators of kallikrein-7 (K7) zymogen (AID 686949) • Counterscreen for activators of kallikrein-7 (K7) zymogen: Fluorescence intensity-based biochemical high throughput counterscreen assay for activators that optically interfere with measurement of EDANS-DABCYL fluorescence (AID 686952)
BRD-K84739463-001-01-5 PubChem CID : 54649194		0.68 (in 2 replicates)	-0.46	0.859				Total number of assays tested in: 36. Active in the following assays: • Inhibition of T.cruzi proliferation in culture Measured in Cell-Based System Using Plate Reader - 2138-01_Inhibitor_SinglePoint_HTS_Activity (AID 624255) • NIH/3T3 (mouse embryonic fibroblast) toxicity Measured in Cell-Based System Using Plate Reader - 2138-02_Inhibitor_SinglePoint_CherryPick_Activity_Set2 (AID 651744)

BRD-K47926873-001-01-8 PubChem CID : 54649225		0.63 (in 2 replicates)	-0.45	0.987				Total number of assays tested in: 42. Active in the following assays: • Inhibition of T.cruzi proliferation in culture Measured in Cell-Based System Using Plate Reader - 2138-01_Inhibitor_SinglePoint_HTS_Activity (AID 624255) • Inhibition of T.cruzi proliferation in culture Measured in Cell-Based System Using Plate Reader - 2138-01_Inhibitor_SinglePoint_CherryPick_Activity (AID 651739) • NIH/3T3 (mouse embryonic fibroblast) toxicity Measured in Cell-Based System Using Plate Reader - 2138-02_Inhibitor_SinglePoint_CherryPick_Activity_Set2 (AID 651744)