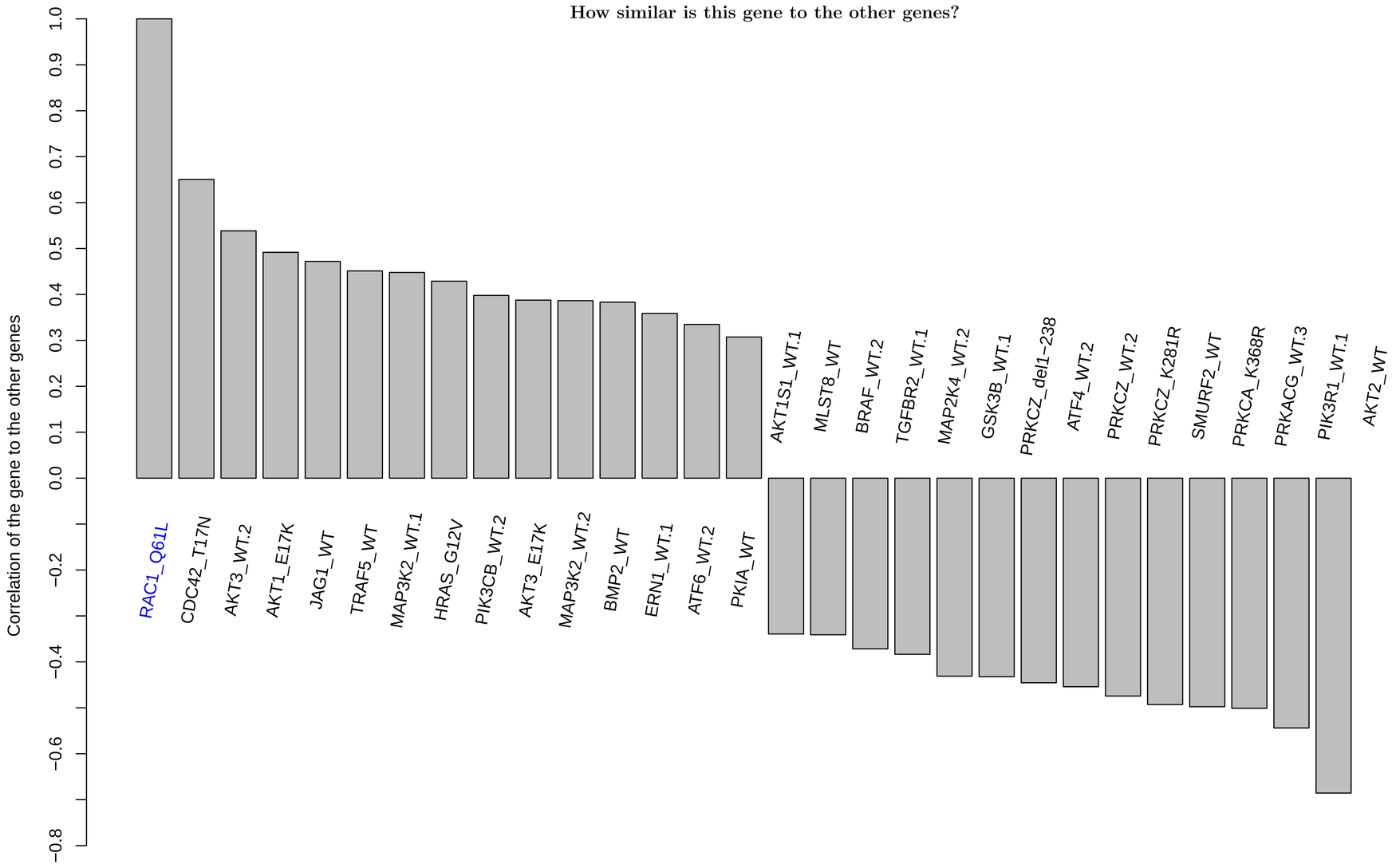
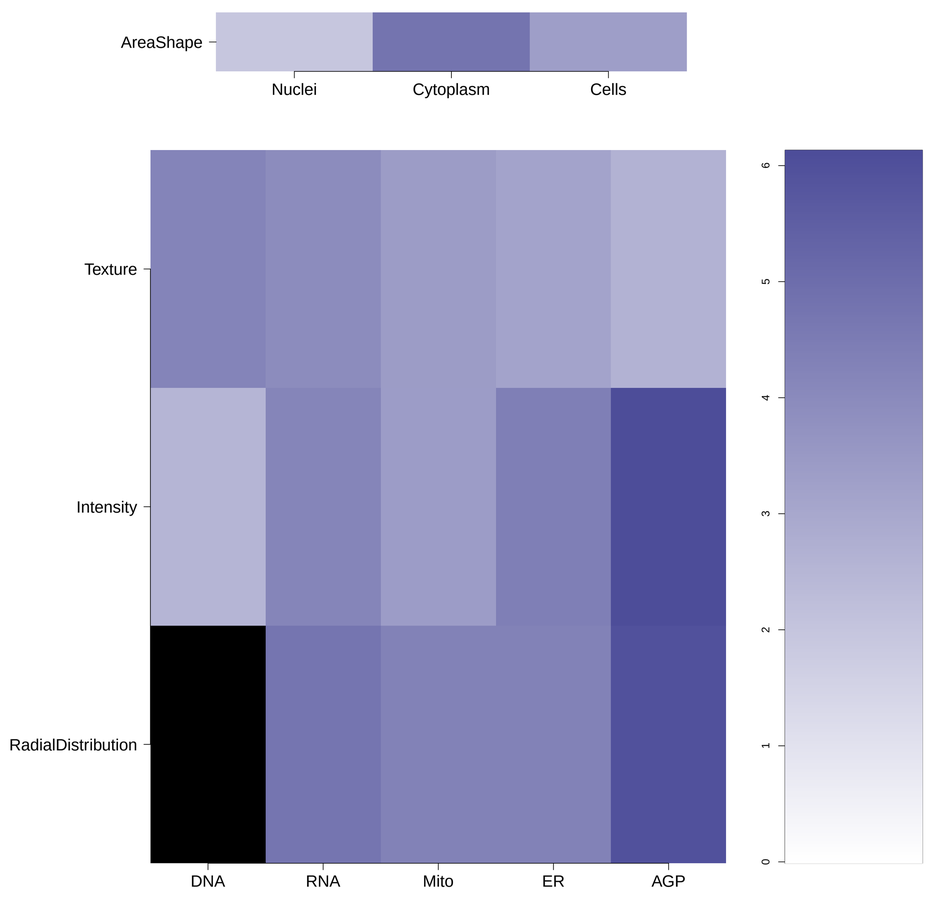
CONFIDENTIAL, contact the Imaging Platform to collaborate on the findings herein

RAC1_Q61L - in Canonical Cytoskeletal Re-org

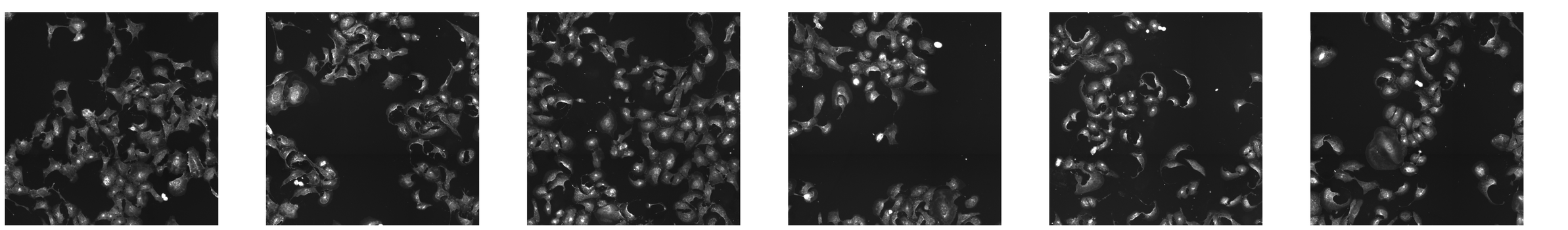
How similar is this gene to the other genes?



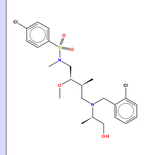
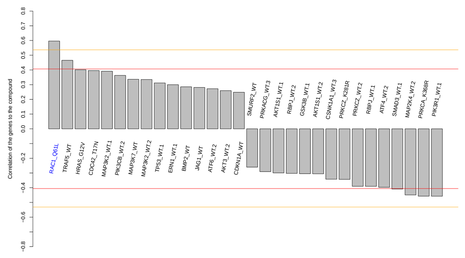
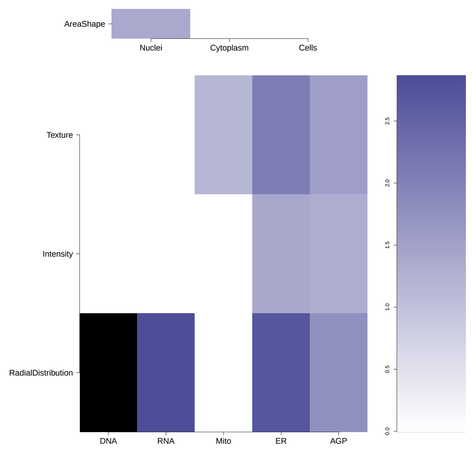
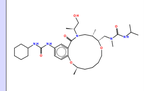
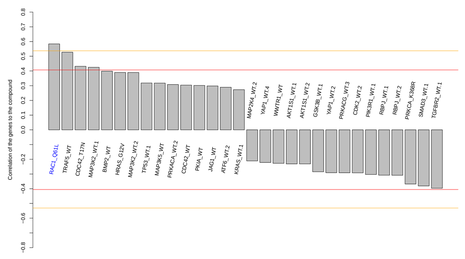
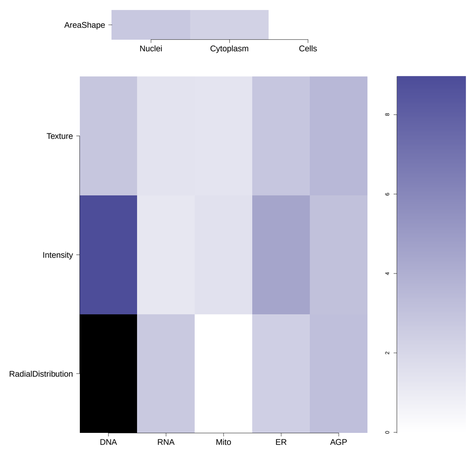
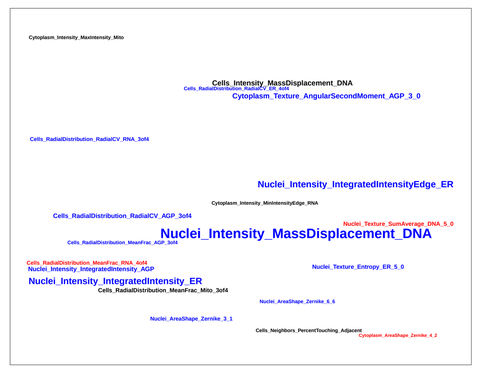
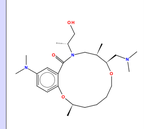
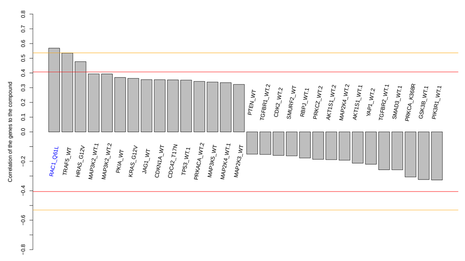
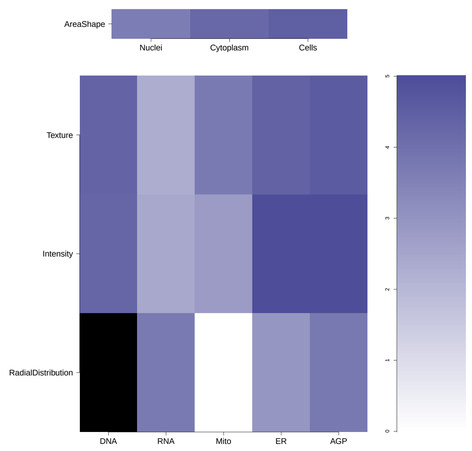
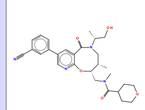
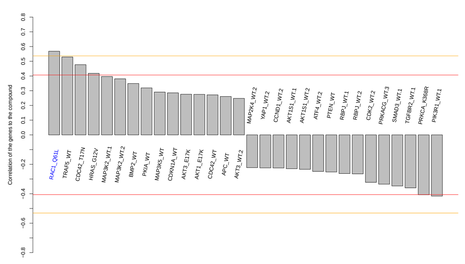
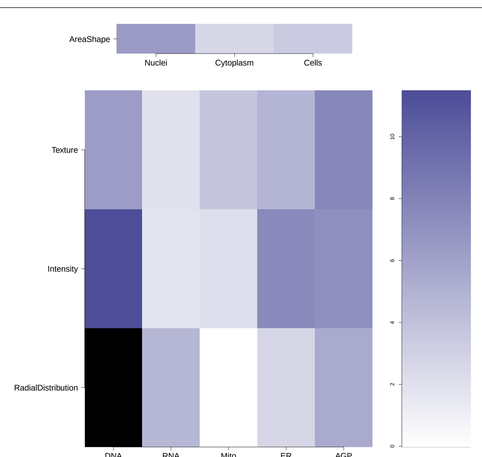
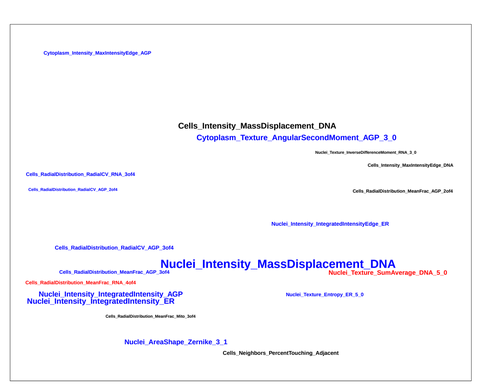
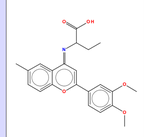
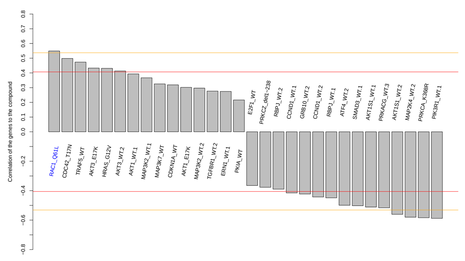
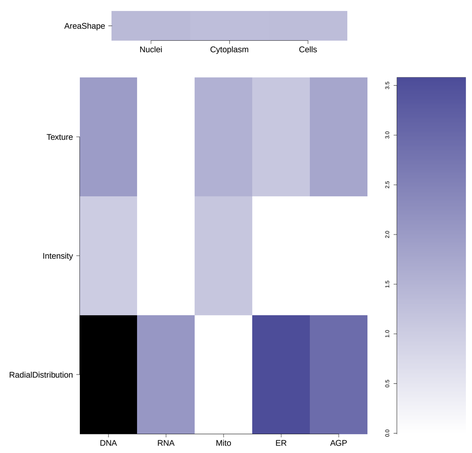
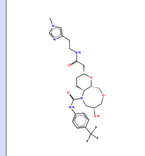
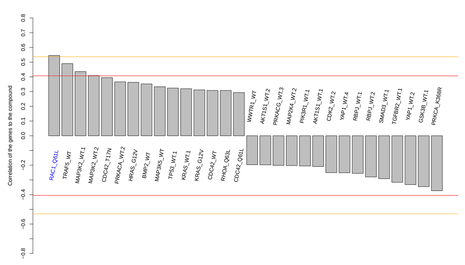
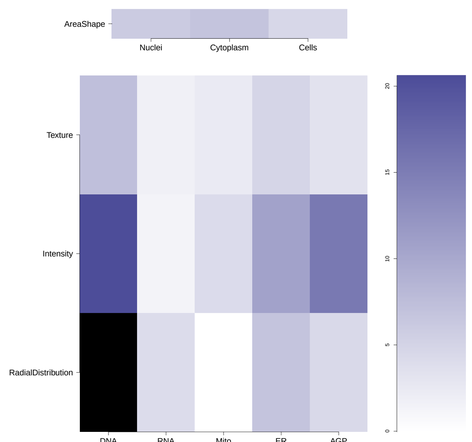
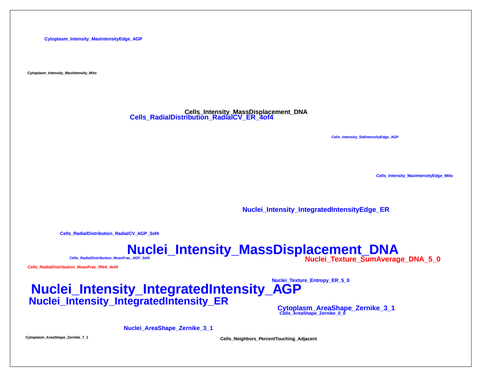
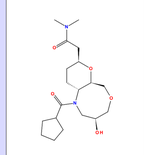
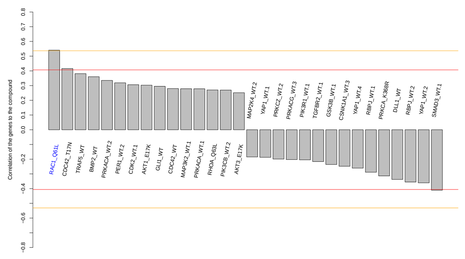
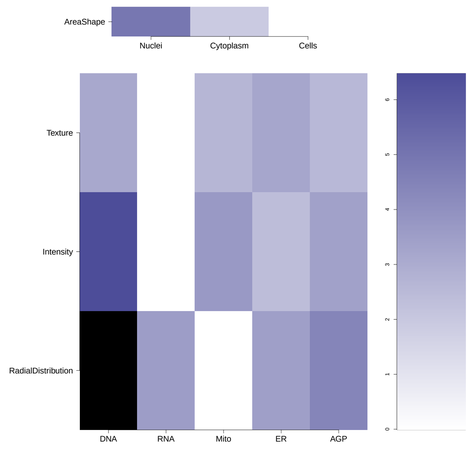
What groups of morphological features are distinguishing in the cluster relative to the untreated samples? (maximum of absolute m-score for the features belonging to the same category; m-score defined as median of a feature z-score across genes in the cluster) Black means no feature is available in the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

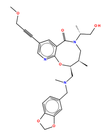
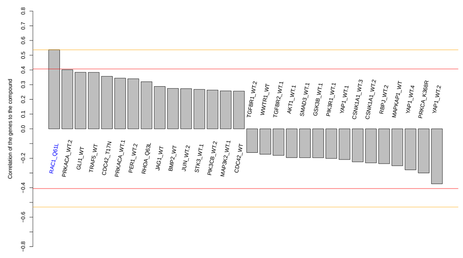
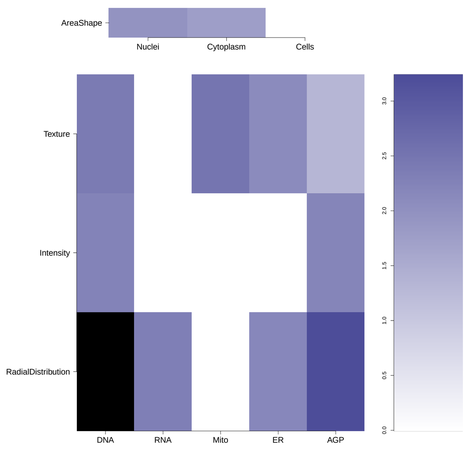
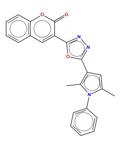
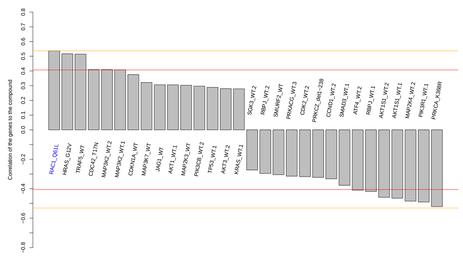
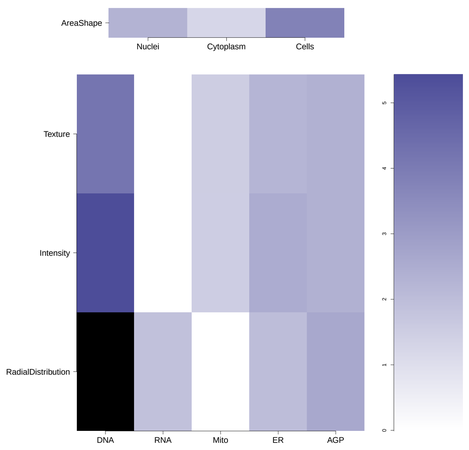
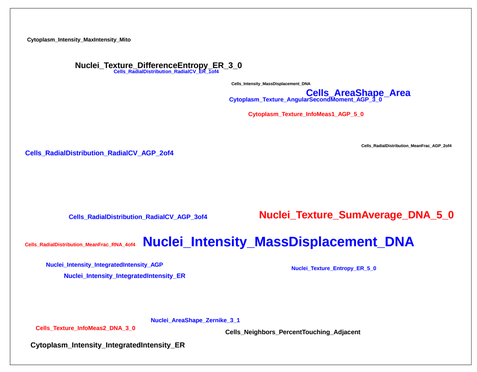
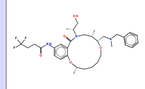
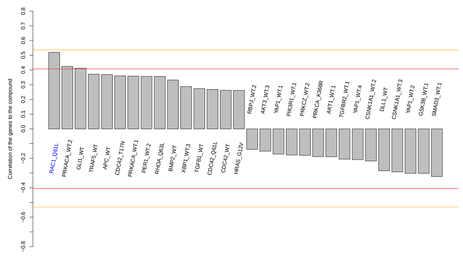
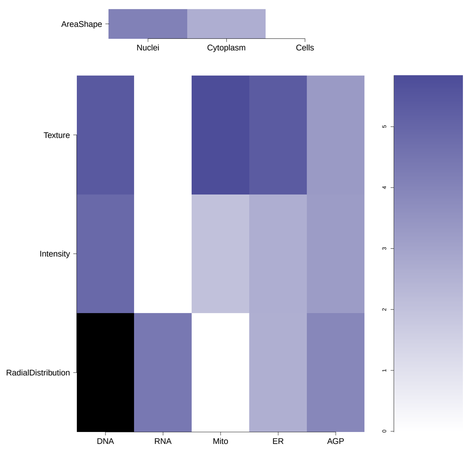
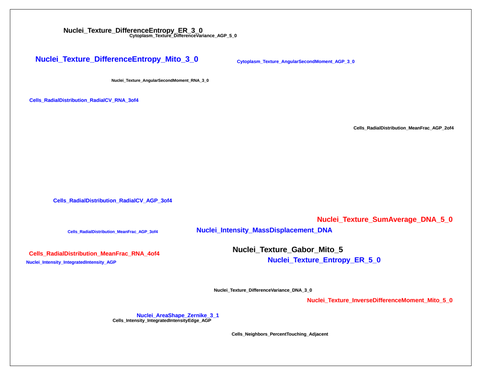
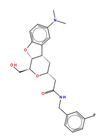
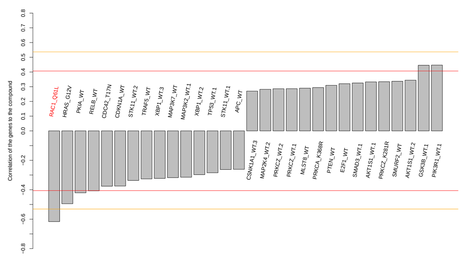
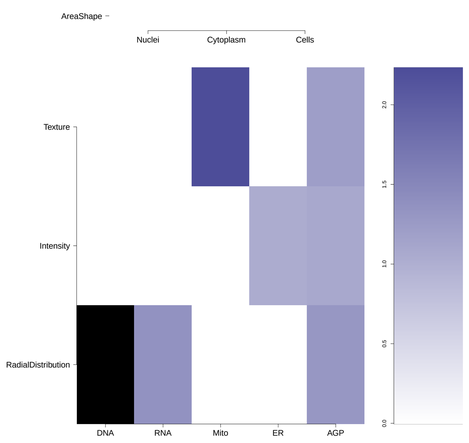
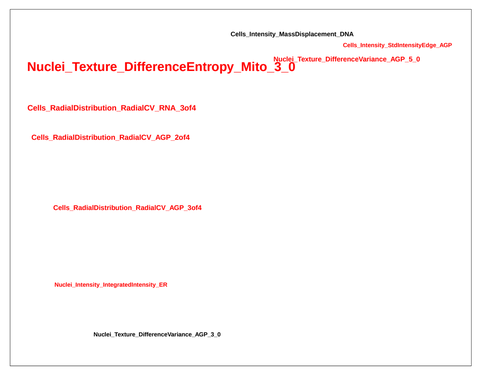
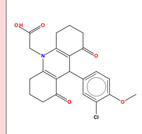
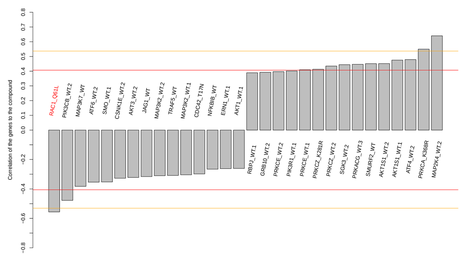
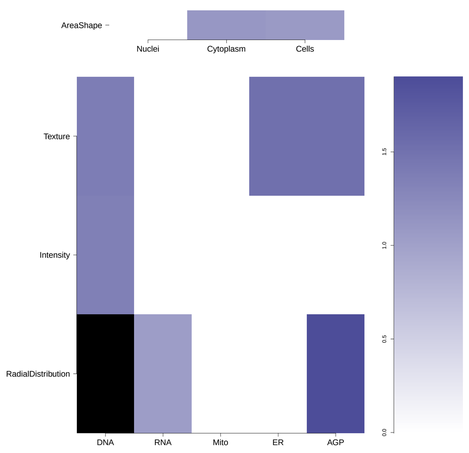
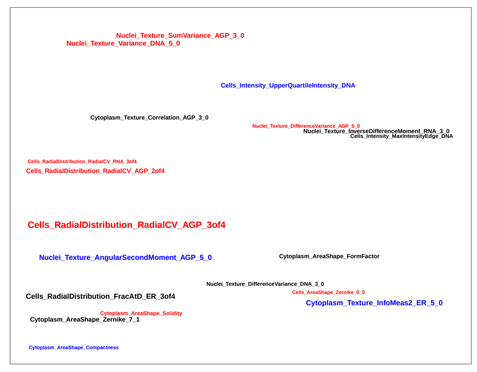
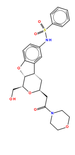
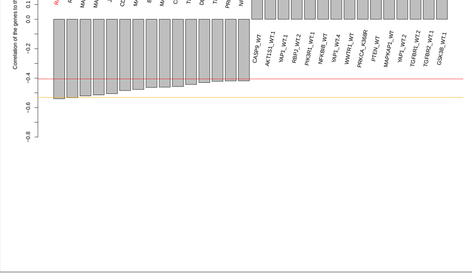
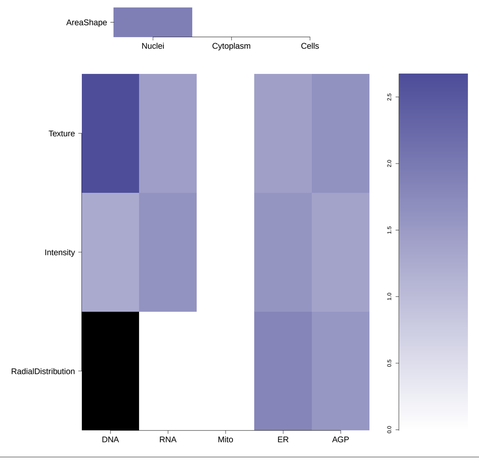
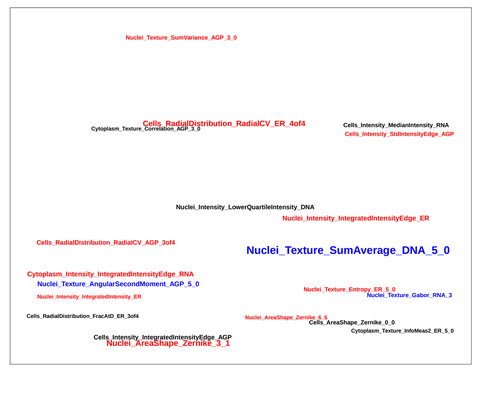


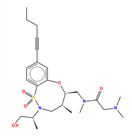
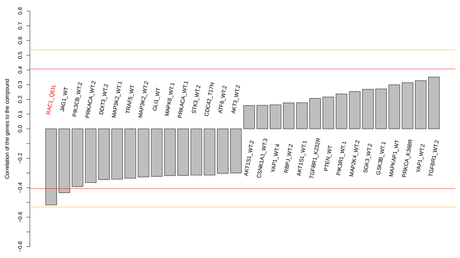
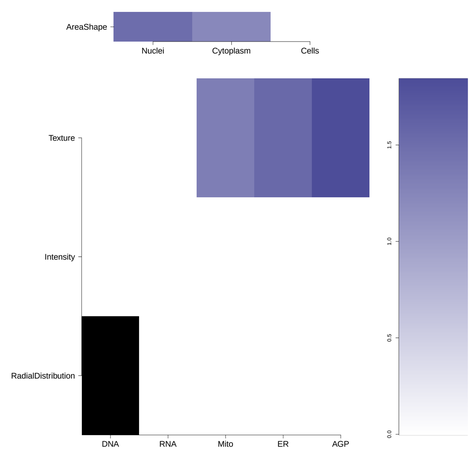
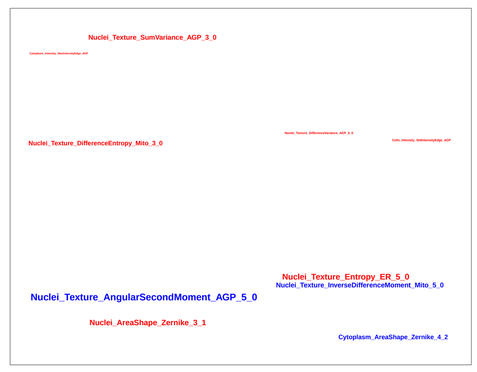
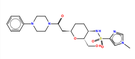
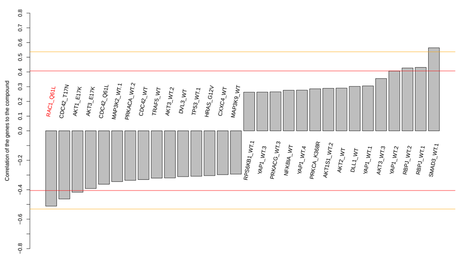
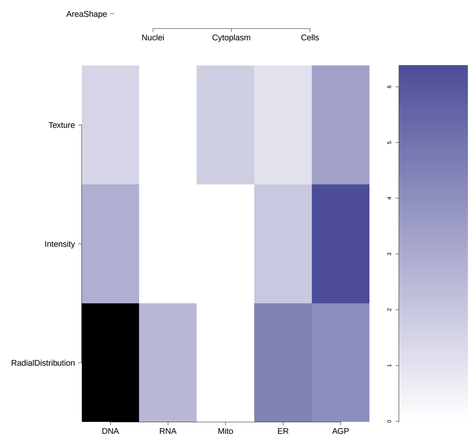
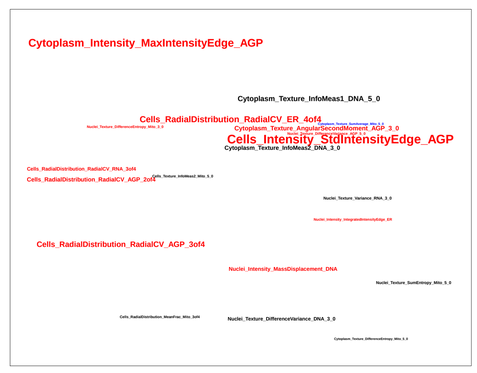
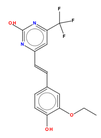
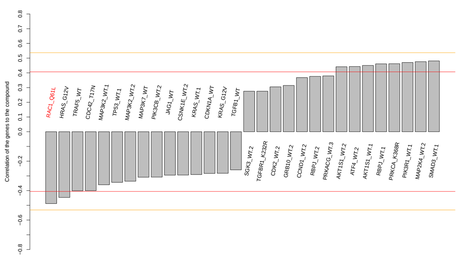
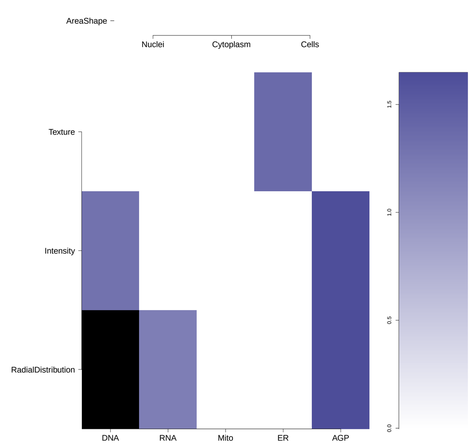
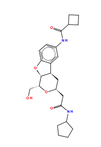
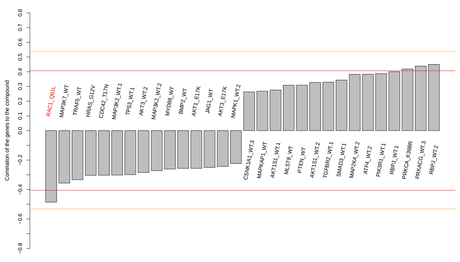
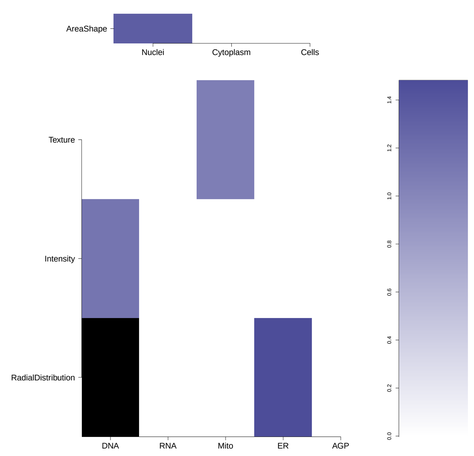
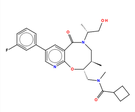
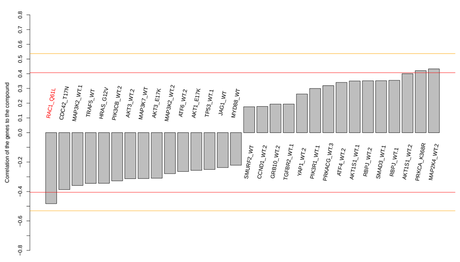
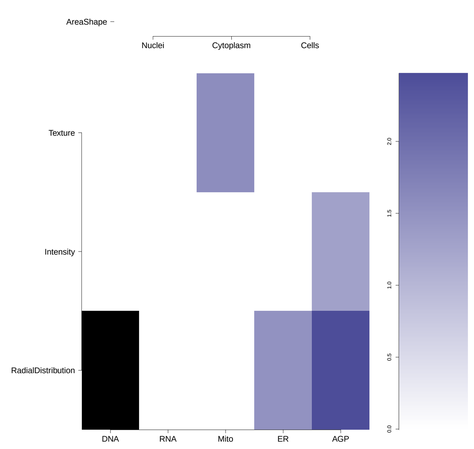
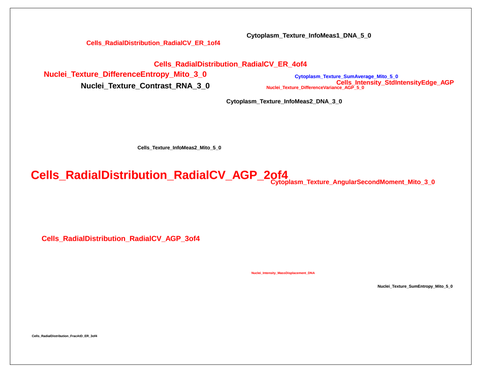
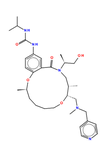
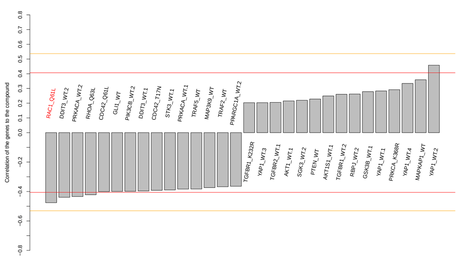
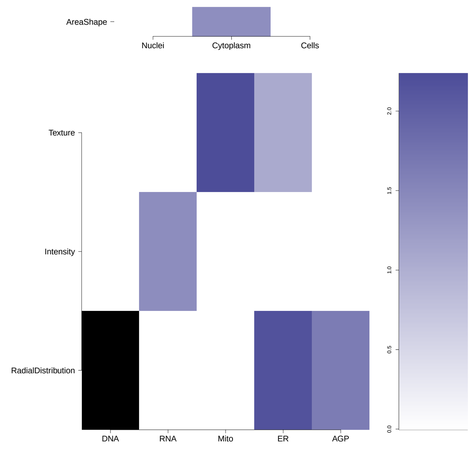
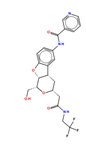
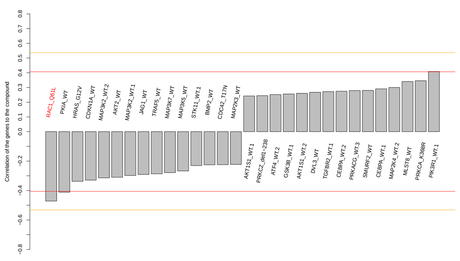
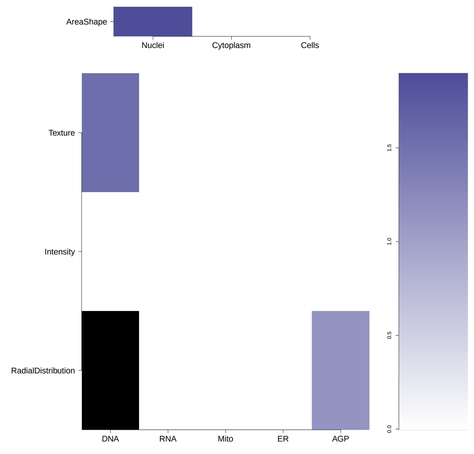
Which individual morphological features are distinguishing in the gene relative to the untreated samples? Blue/Red means the feature has a positive/negative z-score. Size is proportional to the z-score value.



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-K86985145-001-01-8 PubChem CID : 54649205		0.72 (in 2 replicates)	0.60	0.689				Total number of assays tested in: 38. Active in the following assays: • 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)
BRD-K75648723-001-01-5 PubChem CID : 54614898		0.89 (in 4 replicates)	0.58	0.789				Total number of assays tested in: 37.
BRD-K96379403-001-01-9 PubChem CID : 44495452		0.72 (in 4 replicates)	0.57	0.954				Total number of assays tested in: 29.
BRD-K81464255-001-01-5 PubChem CID : 54618888		0.89 (in 3 replicates)	0.57	0.689				Total number of assays tested in: 40.
BRD-A14556598-001-06-7 MLS000402296 SMR000243030 AC1MWISV AC1Q2RLA BDBM63320 CTK6C7395 NE61401 EN300-05982 T0518-2801 956370-25-5 PubChem CID : 3749969		NA (in 1 replicates)	0.55	NA				Total number of assays tested in: 651. Active in the following assays: • Cycloheximide Counterscreen for Small Molecule Inhibitors of Shiga Toxin (AID 2314) • Confirmatory screen for compounds that activate the Choline Transporter (CHT) (AID 504833) • Counter screen assay of the parental HEK293 cells for compounds that activate the Choline Transporter (CHT) (AID 623908) • DENV2 CPE-Based HTS Measured in Cell-Based and Microorganism Combination System Using Plate Reader - 2149-01_Other_SinglePoint_HTS_Activity (AID 651640) • Fluorescence Intensity-based biochemical primary high throughput screening assay to identify activators of kallikrein-7 (K7) zymogen (AID 652039) • 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-K04574057-001-01-5 PubChem CID : 54657509		0.83 (in 4 replicates)	0.55	0.111				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)
BRD-K68148111-001-01-5 PubChem CID : 54657620		0.88 (in 4 replicates)	0.54	0.689				Total number of assays tested in: 35.

BRD-K12762764-001-01-0 PubChem CID : 54619192		0.81 (in 4 replicates)	0.54	0.175				Total number of assays tested in: 39.
BRD-K35381497-001-05-7 MLS000055897 AC1M8PPB HMS2394G10 SMR000064536 PubChem CID : 2517964		0.57 (in 2 replicates)	0.54	NA				Total number of assays tested in: 760. Active in the following assays: • qHTS Assay for Tau Filament Binding (AID 596) • Cycloheximide Counterscreen for Small Molecule Inhibitors of Shiga Toxin (AID 2314) • Antagonist of Human D 1 Dopamine Receptor: qHTS (AID 504652) • qHTS profiling assay for firefly luciferase inhibitor/activator using purifed enzyme and Km concentrations of substrates (counterscreen for miR-21 project) (AID 588342) • Screen for inhibitors of the SWI/SNF chromatin remodeling complex (esBAF) in mouse embryonic stem cells with Luciferase reporter assay Measured in Cell-Based System Using Plate Reader - 2141-01_Inhibitor_SinglePoint_HTS_Activity (AID 602393) • A quantitative high throughput screen for small molecules that induce DNA re-replication in MCF 10a normal breast cells. (AID 624296)
BRD-K56107062-001-01-4 PubChem CID : 44493588		0.90 (in 4 replicates)	0.52	0.689				Total number of assays tested in: 47.
BRD-K34336958-001-01-3 PubChem CID : 54645808		NA (in 1 replicates)	-0.62	0.311				Total number of assays tested in: 38.
BRD-K16508644-001-06-8 BAS 03135098 MLS001212084 STK393571 SMR000518297 AC1LM8DT BDBM72841 HMS2813H10 ZINC19913913 ST50863128 PubChem CID : 1150217		NA (in 1 replicates)	-0.56	NA				Total number of assays tested in: 511. Active in the following assays: • Multiplex HTS Screen of TOR pathway GFP-fusion proteins in Saccharomyes cerevisiae_specifically_ MEP2_MLPCN. (AID 2016) • Multiplex HTS Screen of TOR pathway GFP-fusion proteins in Saccharomyes cerevisiae_specifically_ RPL19A_MLPCN. (AID 2025) • Fluorescence Cell-Free Homogeneous Primary HTS to Identify Inhibitors of the RanGTP-Importin-beta complex (AID 2216) • qHTS Assay for the Inhibitors of Schistosoma Mansoni Peroxiredoxins (AID 485364) • Heat Shock Factor-1 (HSF-1) Measured in Cell-Based System Using Plate Reader - 2038-01_Activator_SinglePoint_HTS_Activity (AID 504408) • Fluorescence-based biochemical primary high throughput screening assay to identify inhibitors of the fructose-bisphosphate aldolase (FBA) of M. tuberculosis (AID 588726) • A quantitative high throughput screen for small molecules that induce DNA re-replication in MCF 10a normal breast cells. (AID 624296) • Fluorescence Intensity-based biochemical primary high throughput screening assay to identify activators of kallikrein-7 (K7) zymogen (AID 652039) • MLPCN ERAP1 Measured in Biochemical System Using Plate Reader - 7016-01_Inhibitor_SinglePoint_HTS_Activity (AID 652197) • 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) • HTS for Inhibition of CaV1.3 ICDI/IQ interaction using a live-cell FRET assay Measured in Cell-Based System Using Plate Reader - 7081-01_Inhibitor_SinglePoint_HTS_Activity (AID 743397) • HTS for Inhibition of CaV1.3 ICDI/IQ interaction using a live-cell FRET assay Measured in Cell-Based System Using Plate Reader - 7081-01_Inhibitor_Dose_CherryPick_Activity (AID 1053205)
BRD-K10894258-001-01-6 PubChem CID : 54645973		NA (in 1 replicates)	-0.54	0.983				Total number of assays tested in: 41.

BRD-K61287439-001-01-3 PubChem CID : 54619342		0.57 (in 4 replicates)	-0.52	0.311				Total number of assays tested in: 38.
BRD-K09541394-001-01-1 PubChem CID : 54641287		NA (in 1 replicates)	-0.51	NA				Total number of assays tested in: 40.
BRD-K19768759-001-05-8 AC1NSO3D MLS000713592 HMS2637L15 SMR000273073 PubChem CID : 5337126		NA (in 1 replicates)	-0.49	NA				Total number of assays tested in: 626. Active in the following assays: • qHTS for Inhibitors of Tau Fibril Formation, Thioflavin T Binding (AID 1460) • MLPCN Alpha-Synuclein 5'UTR - 5'-UTR binding - activators (AID 1814) • Identification of SV40 T antigen inhibitors: A route to novel anti-viral reagents (AID 1903) • qHTS Assay for Inhibitors and Activators of Human alpha-Glucosidase Cleavage of Glycogen (AID 2100) • 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) • HTS-Luminescent assay for inhibitors of ALR by detection of hydrogen peroxide production Measured in Biochemical System Using Plate Reader - 2036-02_Inhibitor_SinglePoint_HTS (AID 485317) • Nrf2 qHTS screen for inhibitors (AID 504444) • Confirmation screen for delayed death inhibitors of the malarial parasite plastid, 96 hour incubation (AID 504848) • qHTS for Inhibitors of Inflammasome Signaling: IL-1-beta AlphaLISA Primary Screen (AID 743279)
BRD-K39504007-001-01-2 PubChem CID : 54645951		NA (in 1 replicates)	-0.49	0.922				Total number of assays tested in: 41.
BRD-K48912618-001-01-7 PubChem CID : 54619432		0.62 (in 4 replicates)	-0.48	0.840				Total number of assays tested in: 38.
BRD-K08922114-001-01-3 PubChem CID : 44496894		0.63 (in 4 replicates)	-0.48	NA				Total number of assays tested in: 42.
BRD-K79339982-001-01-3 PubChem CID : 54646632		0.54 (in 4 replicates)	-0.47	0.120				Total number of assays tested in: 38.