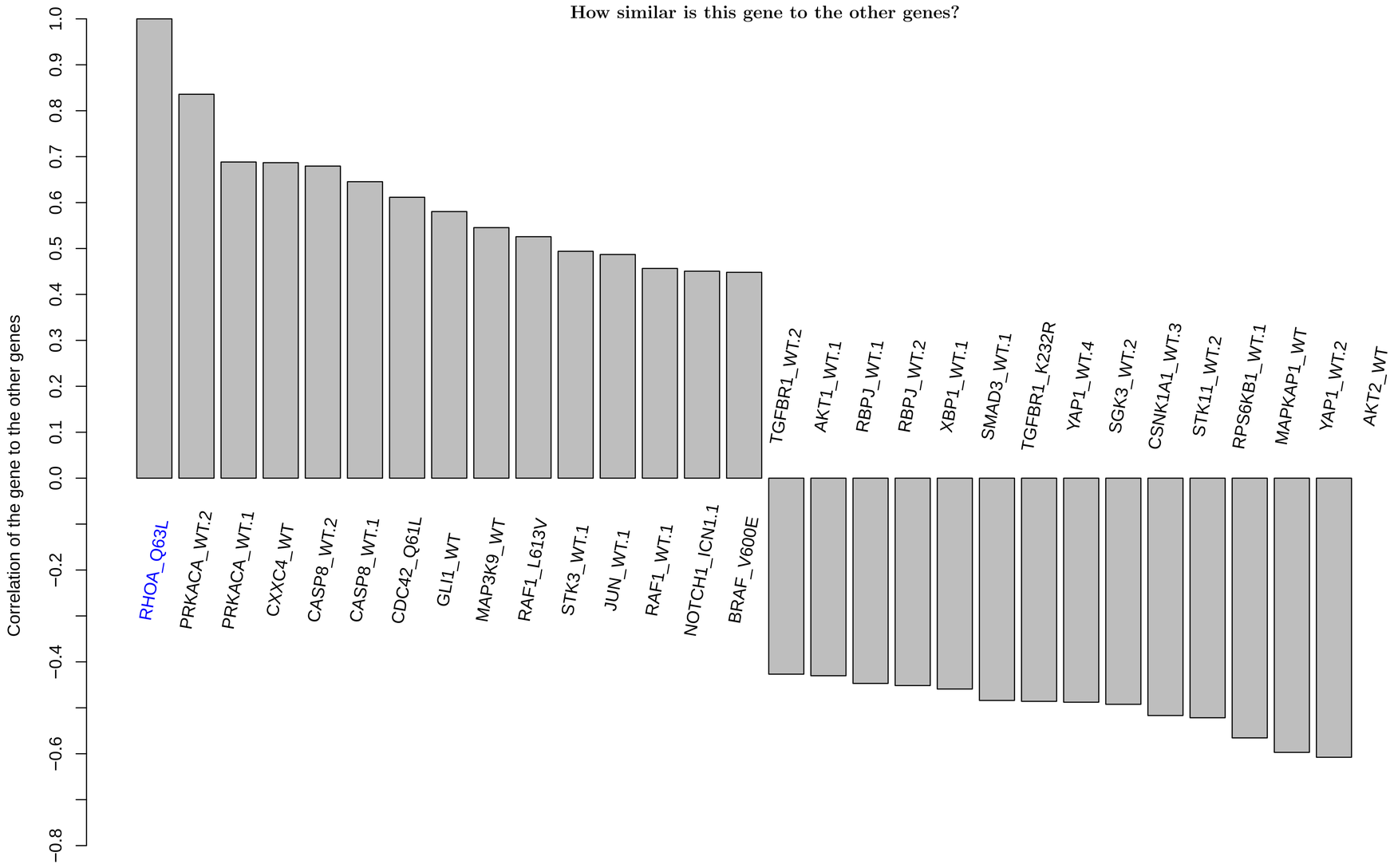
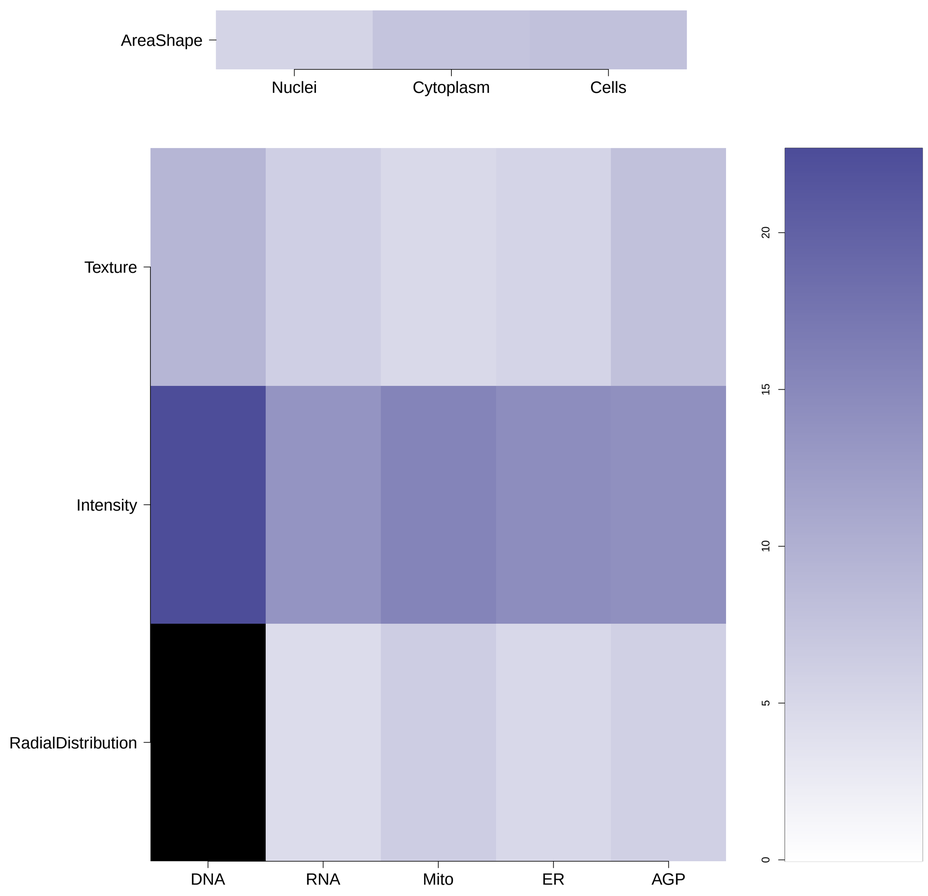
RHOA_Q63L - in Canonical Cytoskeletal Re-org

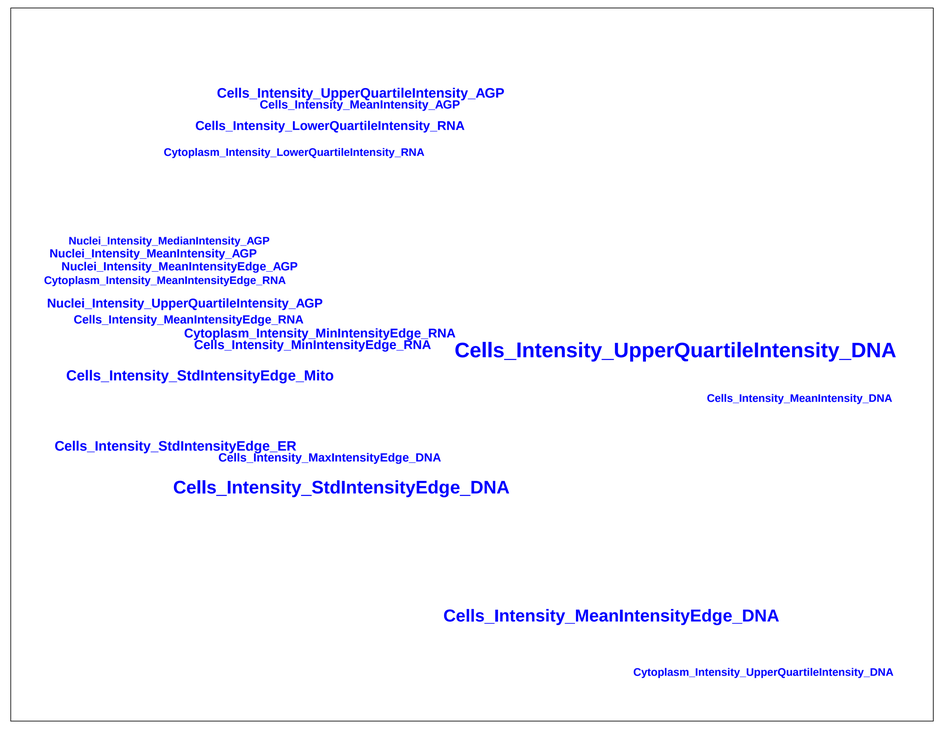
How similar is this gene to the other genes?

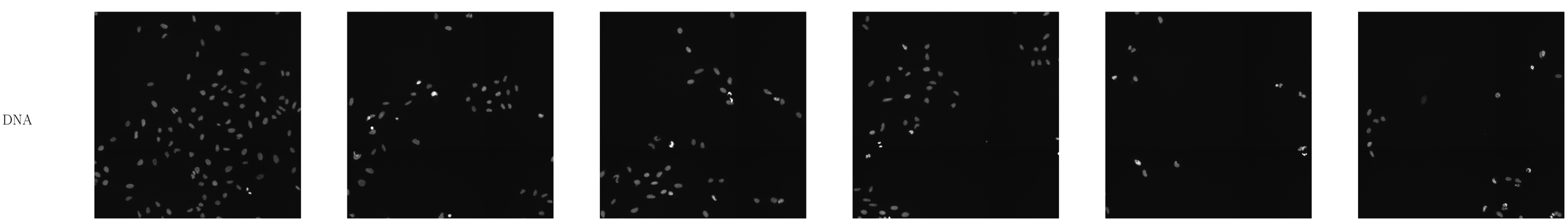


What groups of morphological features are distinguishing in the cluster relative to the untreated samples? (maximum of absolute m-score for the features belonging to the same category; m-score defined as median of a feature z-score across genes in the cluster) Black means no feature is available in the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

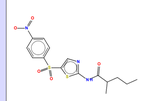
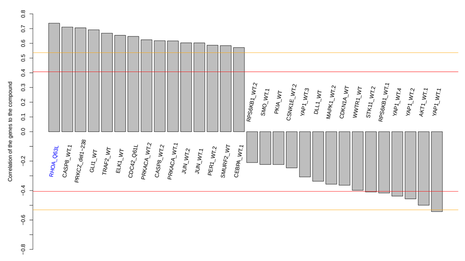
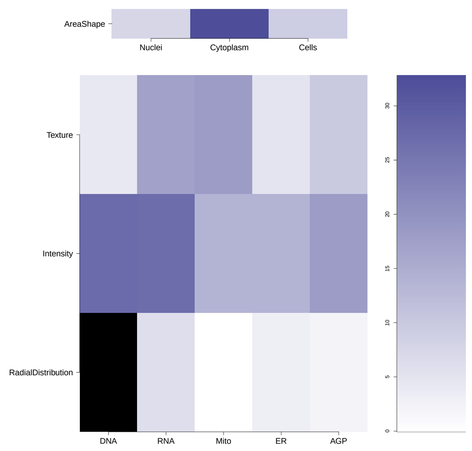
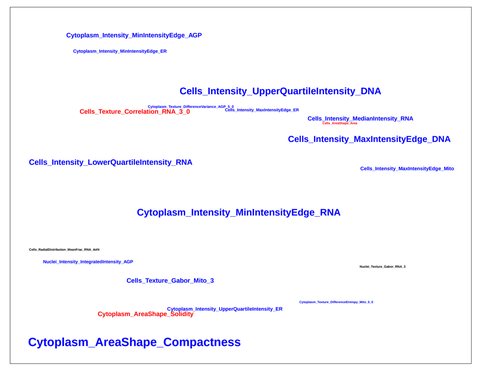
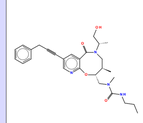
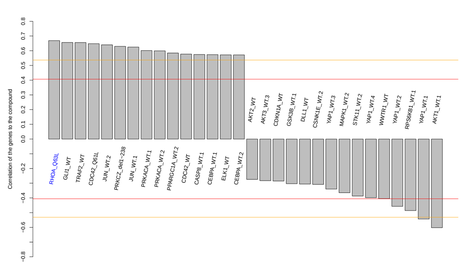
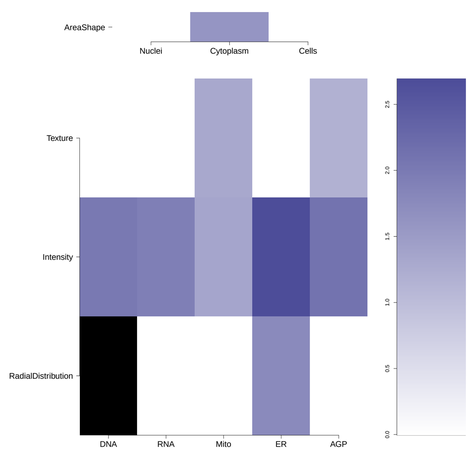
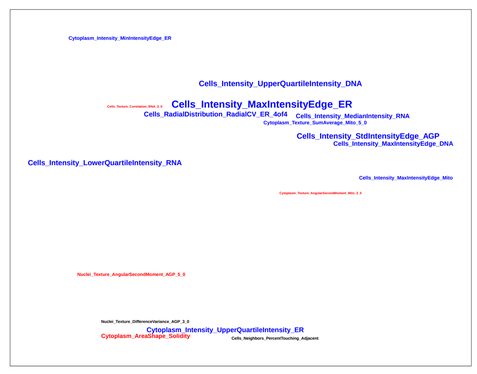


Which individual morphological features are distinguishing in the gene relative to the untreated samples? Blue/Red means the feature has a positive/negative z-score. Size is proportional to the z-score value.





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-A61437901-001-06-4 AC1MELUG MLS001034555 HMS2964O04 STK056804 SMR000664698 ST50589848 PubChem CID : 2905407		0.93 (in 2 replicates)	0.74	NA				Total number of assays tested in: 505. Active in the following assays: • Fluorescence-based primary cell-based high throughput screening assay to identify antagonists of the G-protein coupled receptor 7 (GPR7). (AID 1861) • Luminescence Cell-Based/Microorganism Primary HTS to Identify Inhibitors of T.Cruzi Replication (AID 1885) • Fluorescence-based confirmation cell-based high throughput screening assay to identify antagonists of the G-protein coupled receptor 7 (GPR7). (AID 1952) • Luminescence Cell-Based/Microorganism Dose Confirmation HTS to Identify Inhibitors of T.Cruzi Replication. (AID 2044) • Fluorescence-based counterscreen for antagonists of the G-protein coupled receptor 7 (GPR7): cell-based high throughput screening assay to identify antagonists of the melanin-concentrating hormone receptor 1 (MCHR1). (AID 2148) • Fluorescence-based primary cell-based high throughput screening assay to identify agonists of the Oxytocin Receptor (OXTR). (AID 2435) • Counterscreen for Oxytocin Receptor (OXTR) agonists: Fluorescence-based primary cell-based high throughput assay to identify agonists of the vasopressin 1 receptor (V1R) (AID 2797) • Luminescence-based cell-based primary high throughput screening assay to identify agonists of heterodimerization of the mu 1 (OPRM1) and delta 1 (OPRD1) opioid receptors (AID 504326) • Antagonist of Human D 1 Dopamine Receptor: qHTS (AID 504652) • Allosteric Agonists of the Human D1 Dopamine Receptor: qHTS (AID 504660) • Primary qHTS for delayed death inhibitors of the malarial parasite plastid, 48 hour incubation (AID 504832) • Fluorescence-based cell-based primary high throughput screening assay to identify agonists of the human cholinergic receptor, muscarinic 1 (CHRM1) (AID 588814) • Full deck counterscreen for agonists of the human M1 muscarinic receptor (CHRM1): Fluorescence-based cell-based high throughput screening assay to identify nonselective activators and assay artifacts using the parental CHOK1 cell line (AID 602248) • Fluorescence-based cell-based primary high throughput screening assay to identify agonists of the human cholinergic receptor, muscarinic 5 (CHRM5) (AID 624037) • Fluorescence-based cell-based primary high throughput screening assay to identify agonists of the human cholinergic receptor, muscarinic 4 (CHRM4) (AID 624127) • Fluorescence-based cell-based primary high throughput screening assay to identify antagonists of the human trace amine associated receptor 1 (TAAR1) (AID 624466) • Fluorescence-based cell-based primary high throughput screening assay to identify agonists of the human trace amine associated receptor 1 (TAAR1) (AID 624467) • qHTS for Inhibitors of human tyrosyl-DNA phosphodiesterase 1 (TDP1): qHTS in cells in presence of CPT (AID 686979) • qHTS for Inhibitors of KCHN2 3.1: Wildtype qHTS (AID 720551) • qHTS for Inhibitors of KCHN2 3.1: Mutant qHTS (AID 720553) • qHTS for Stage-Specific Inhibitors of Vaccinia Orthopoxvirus: mCherry Reporter Primary qHTS (AID 720579)
BRD-K25144184-001-07-5 MLS000703473 SMR000322926 F0440-0373 ZINC04078730 AC1NASUU BDBM69090 HMS2685M05 ZINC4078730 PubChem CID : 4432160		0.65 (in 2 replicates)	0.68	NA				Total number of assays tested in: 640. Active in the following assays: • Luminescence-based primary biochemical high throughput screening assay to identify inhibitors of the Heat Shock Protein 90 (HSP90) (AID 1789) • Aqueous Solubility from MLSMR Stock Solutions (AID 1996) • Cell-Free Homogeneous Primary HTS to Identify Inhibitors of GSK3beta Activity (AID 2097) • Luminescence Cell-Free Homogenous Primary HTS to Identify Inhibitors of GSK-3 alpha (AID 2650) • Luminescence Cell-Free Homogeneous Dose Retest to Identify Inhibitors of Glycogen Synthase Kinase-3 beta Activity (AID 434954) • Inhibition of Human GSK-3 beta Activity Measured in Biochemical System Using Microfluidics - 2063-05_Inhibitor_Dose_DryPowder_Activity_Set2 (AID 588429) • Inhibition of Human CDK5 Activity Measured in Biochemical System Using Microfluidics - 2063-07_Inhibitor_Dose_DryPowder_Activity (AID 588430) • Inhibition of Human GSK-3 alpha Activity Measured in Biochemical System Using Microfluidics - 2063-06_Inhibitor_Dose_DryPowder_Activity_Set2 (AID 588434) • Fluorescence-based cell-based primary high throughput screening assay to identify antagonists of the Galanin Receptor 3 (GalR3) (AID 651719) • Fluorescence-based cell-based primary high throughput confirmation assay to identify antagonists of the Galanin Receptor 3 (GalR3) (AID 652245) • Luminescent GLuc Reporter Gene Assay Primary HTS to Identify Small Molecule Activator of Glucose Dependent Insulin Secretion Measured in Cell-Based System Using Plate Reader - 7055-01_Activator_SinglePoint_HTS_Activity (AID 743287)
BRD-K91098396-001-01-9 PubChem CID : 54619176		0.76 (in 4 replicates)	0.67	0.047				Total number of assays tested in: 37.

BRD-A96875824-001-06-8
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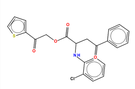
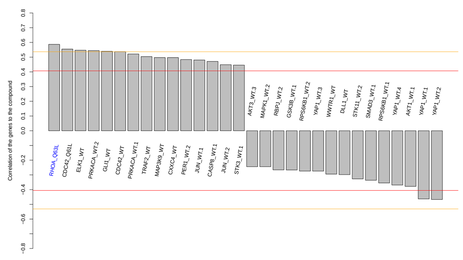
STK286148
SMR000197925
AC1MGC3Z
BDBM63137
HMS2419L03
PubChem CID : 2933627

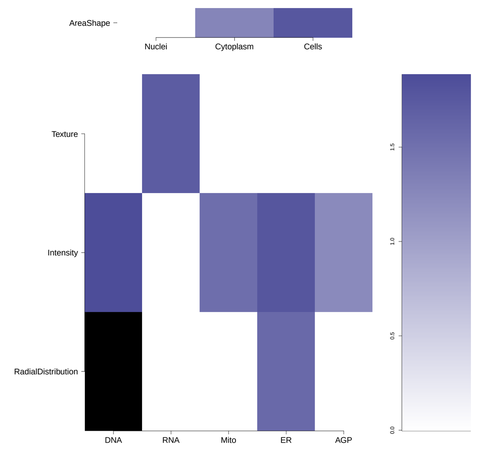


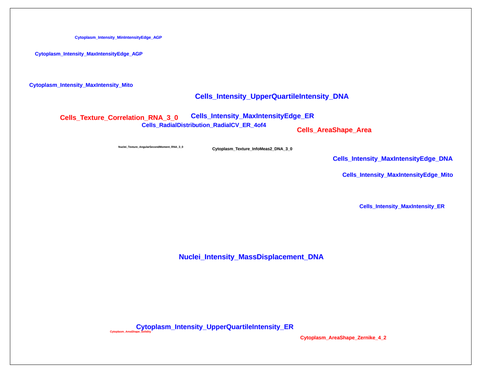
0.66 (in 4 replicates)

0.59

NA



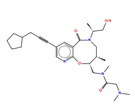




Total number of assays tested in: 661. Active in the following assays:

- CYP2C9 Assay (AID 777)
- CYP2C19 Assay (AID 778)
- Screen for Chemicals that Inhibit the RAM Network (AID 868)
- qHTS Assay for Inhibitors of Aldehyde Dehydrogenase 1 (ALDH1A1) (AID 1030)
- qHTS Assay for Inhibitors of Bacillus subtilis Sfp phosphopantetheinyl transferase (PPTase) (AID 1490)
- Luminescence-based primary biochemical high throughput screening assay to identify inhibitors of the Heat Shock Protein 90 (HSP90) (AID 1789)
- MLPCN Alpha-Synuclein 5'UTR - 5'-UTR binding - activators (AID 1814)
- Luminescence-based confirmation biochemical high throughput screening assay for inhibitors of the Heat Shock Protein 90 (HSP90) (AID 1846)
- Luminescence-based counterscreen assay for HSP90 inhibitors: biochemical high throughput screening assay to identify inhibitors of native luciferase. (AID 1847)
- Luminescence Cell-Based Primary HTS to Identify Inhibitors of Heat Shock Factor 1 (HSF1). (AID 2098)
- Cycloheximide Counterscreen for Small Molecule Inhibitors of Shiga Toxin (AID 2314)
- A qHTS for Small Molecule Inhibitors of Shiga Toxin (AID 2315)
- Luminescence Cell-Based Dose Confimation HTS to Identify Inhibitors of Heat Shock Factor 1 (HSF1) (AID 2382)
- Primary cell-based screen for identification of compounds that inhibit the two-pore domain potassium channel KCNK9 (AID 488922)
- Confirmatory screen for identification of compounds that inhibit the two-pore domain potassium channel (KCNK9) (AID 492992)
- Second counter screen for compounds that modulate the two-pore domain potassium channel (KCNK9) (AID 492997)
- qHTS Assay for Inhibitors of Histone Lysine Methyltransferase G9a (AID 504332)
- qHTS Assay for Inhibitors of Mammalian Selenoprotein Thioredoxin Reductase 1 (TrxR1): qHTS (AID 588453)
- Primary biochemical fluorescence polarization-based high throughput screening assay to identify inhibitors of protein arginine methyltransferase 1 (PRMT1) (AID 652257)

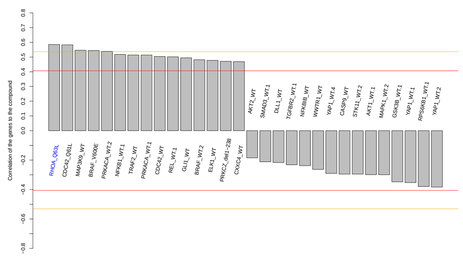
BRD-K48012250-001-01-9
PubChem CID : 54619340

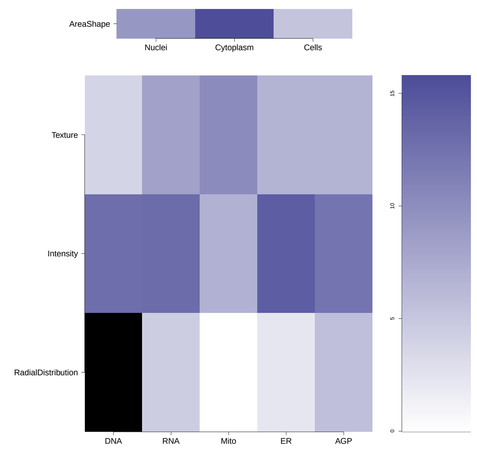


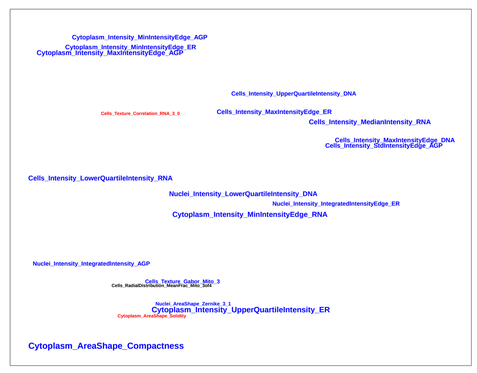
0.58 (in 4 replicates)

0.59

0.310







Total number of assays tested in: 40. Active in the following assays:

- Whole cell Yeast HTS to identify compounds modulating the fidelity of the start codon recognition in eukaryotes. Measured in Whole Organism System Using Plate Reader - 2155-01_Other_SinglePoint_HTS_Activity (AID 602363)

BRD-K37211799-001-06-7
SMR000105318
MLS000109375
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BDBM68651
HMS2308O10
ZINC127964
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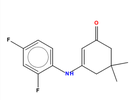
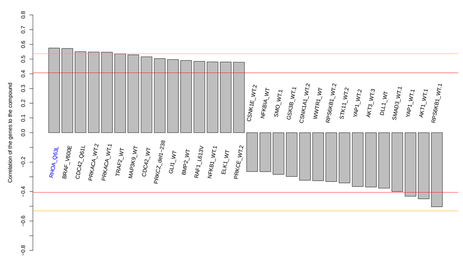
PubChem CID : 549453

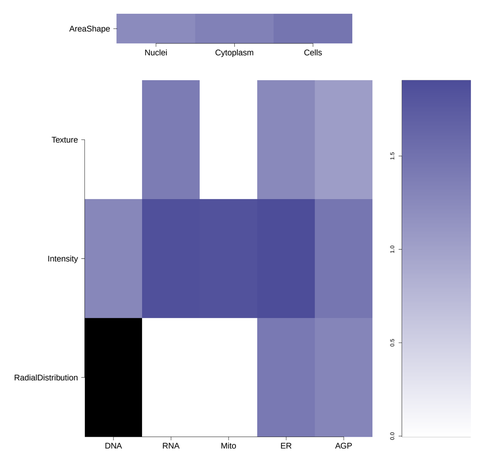


0.80 (in 4 replicates)

0.57

NA

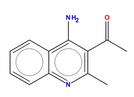




Total number of assays tested in: 763. Active in the following assays:

- Fluorescence Cell-Free Homogeneous Primary HTS to Identify Inhibitors of the RanGTP-Importin-beta complex (AID 2216)
- qHTS of PTHR Inhibitors: Primary Screen (AID 743266)

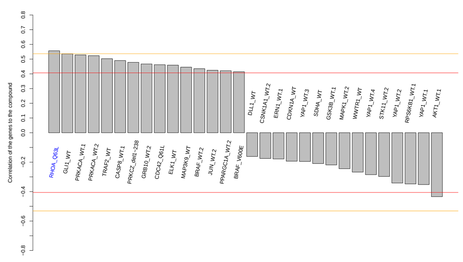
BRD-K42649977-001-05-7
71993-15-2
SMR000079846
MLS000066220
AC1LDQ6W
AC1Q1JG8
MLS005940053
CTK5D5345
ZINC33978
HMS2303A08
STK203174
NE22089
HE080146
ST048894
KB-214179
EN300-13430
T5369186
PubChem CID : 672297

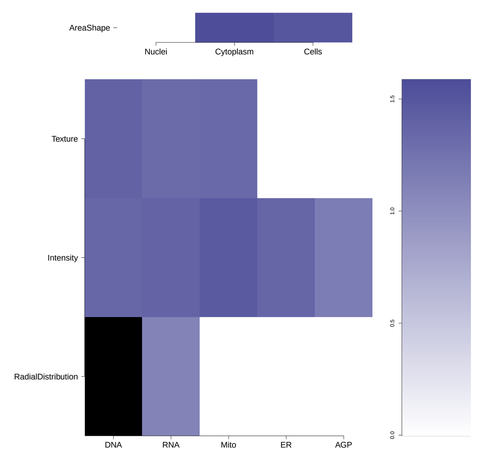


0.52 (in 4 replicates)

0.56

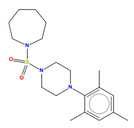
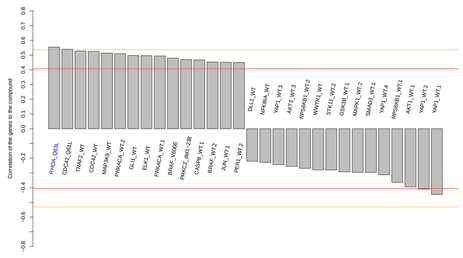
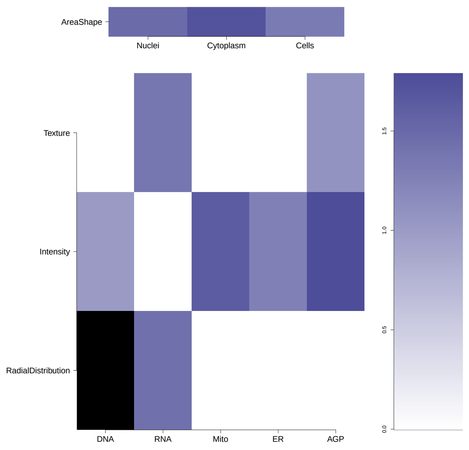
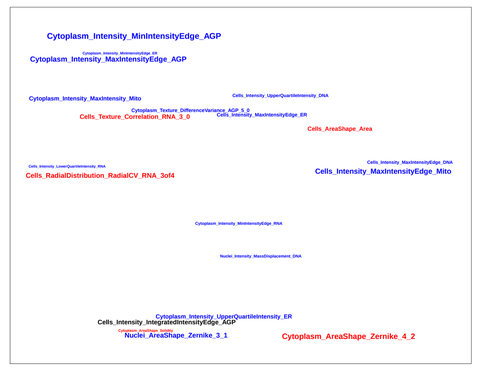
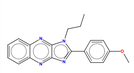
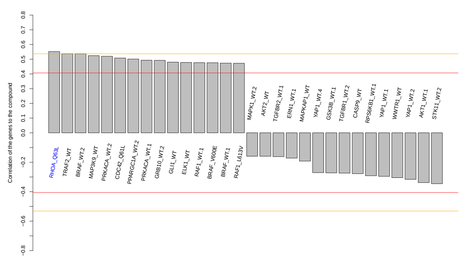
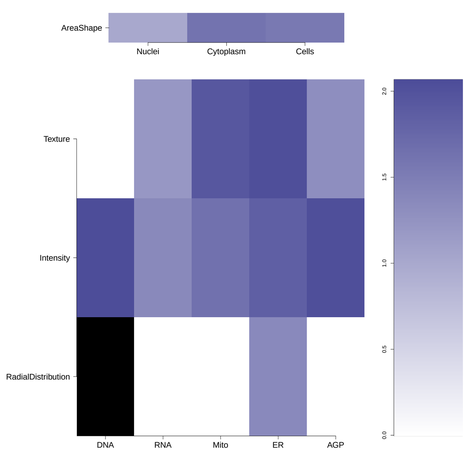
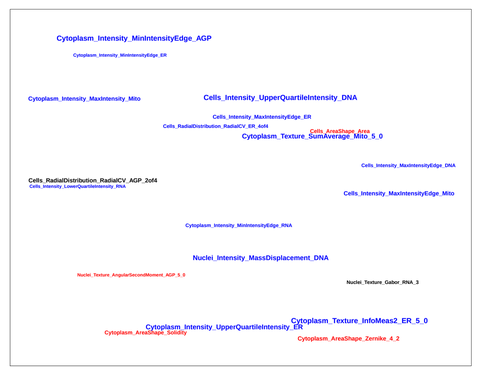
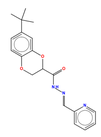
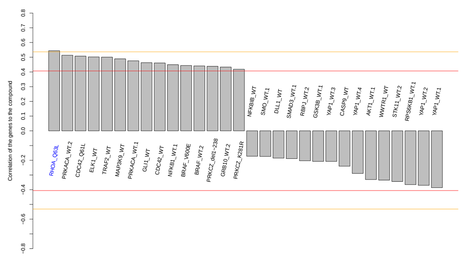
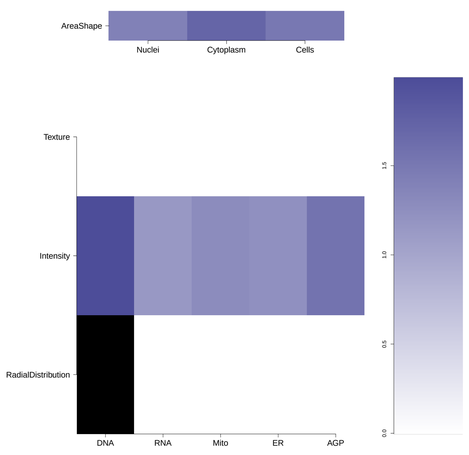
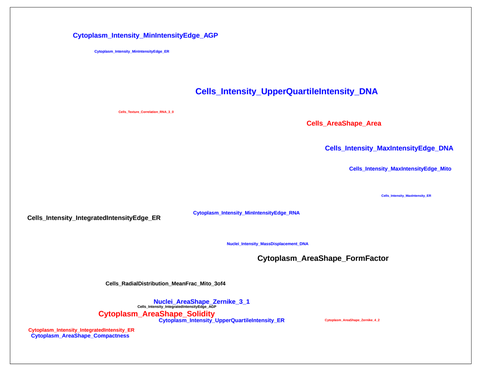
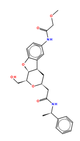
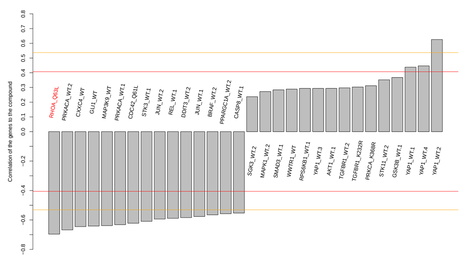
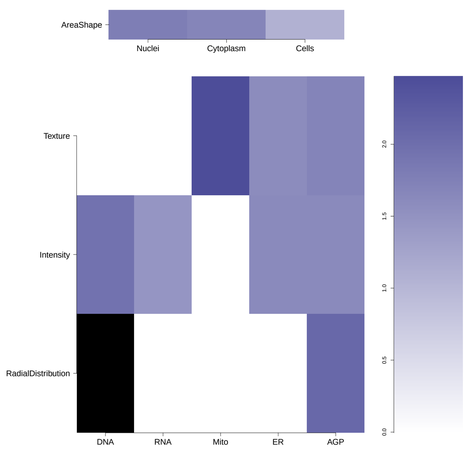
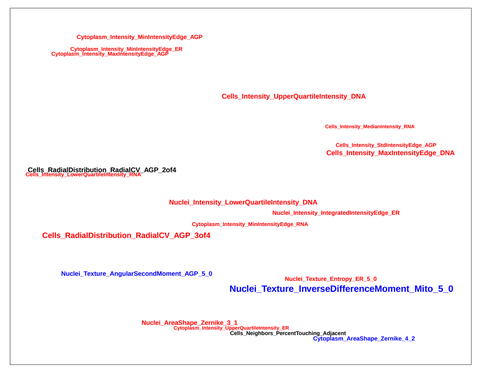
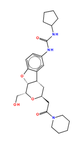
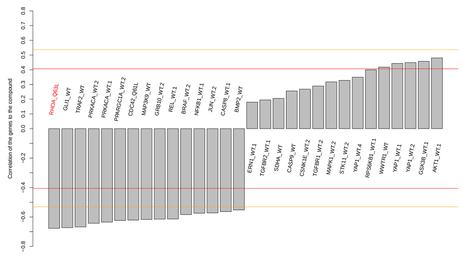
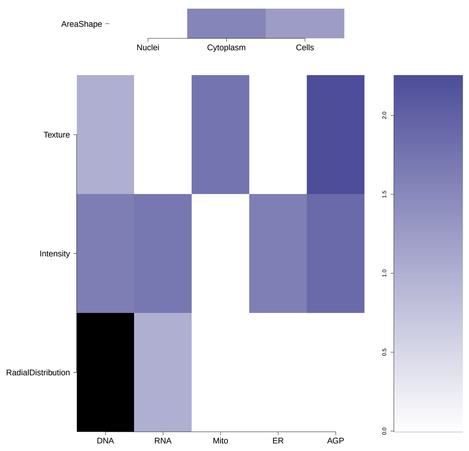
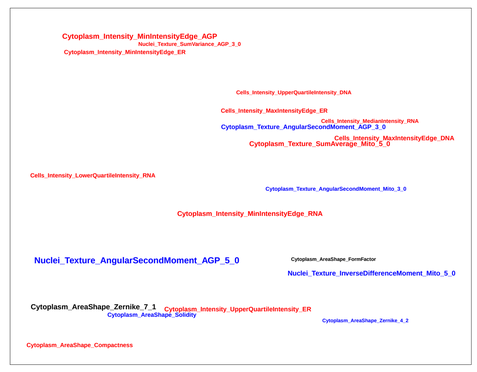
NA

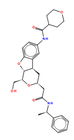
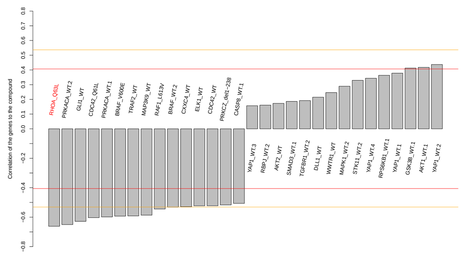
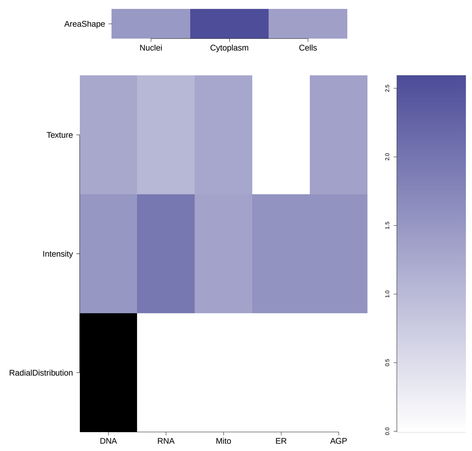
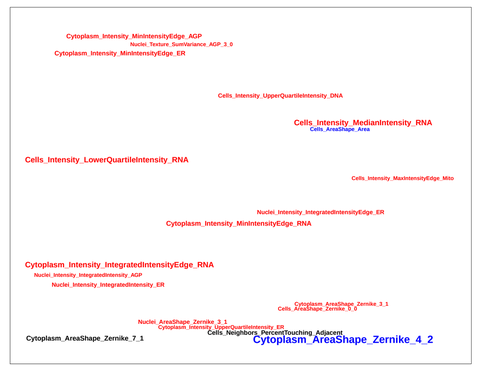
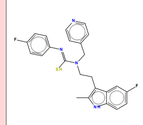
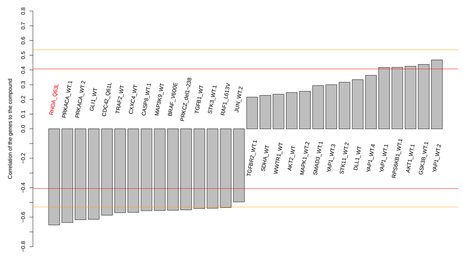
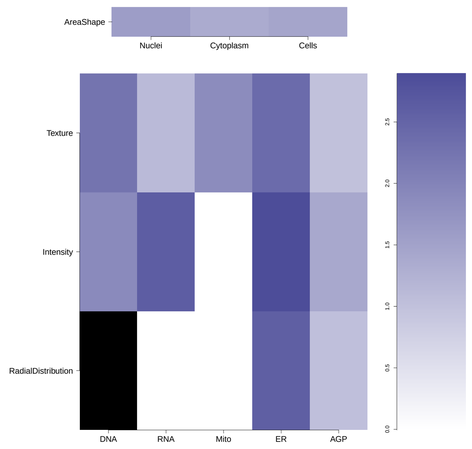
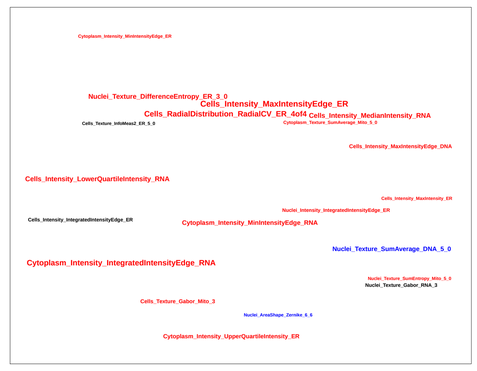
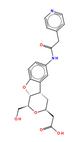
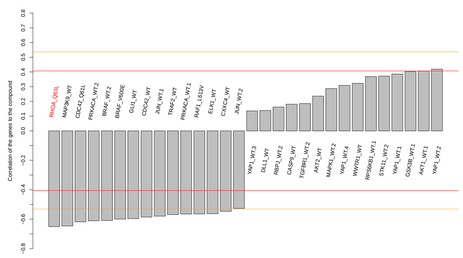
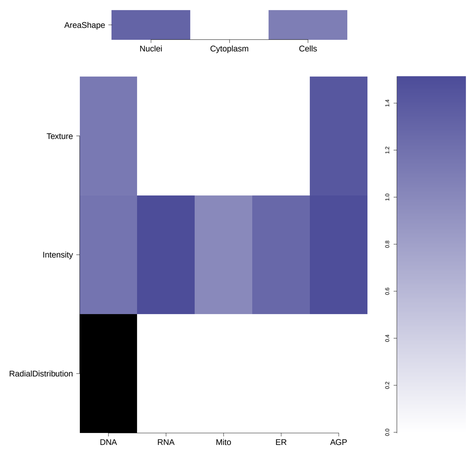
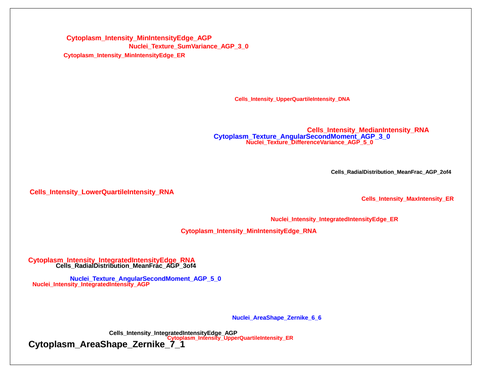
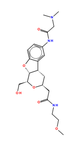
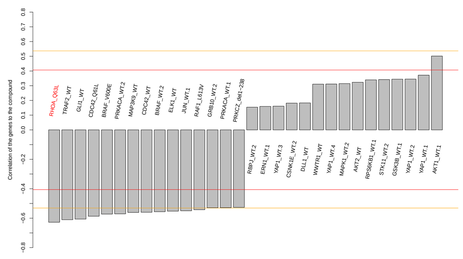
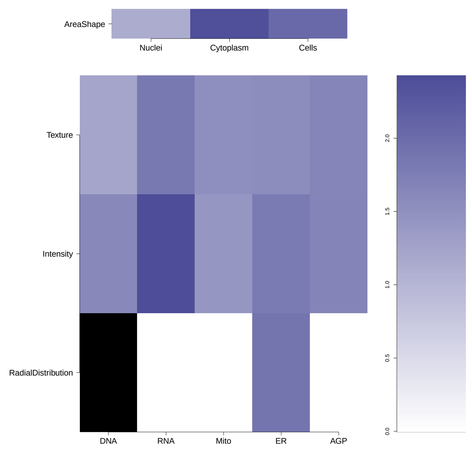
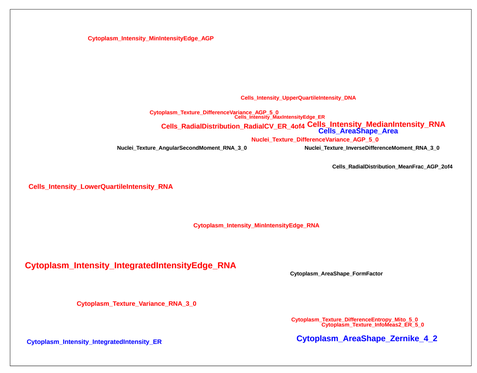
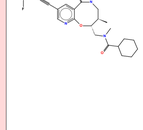
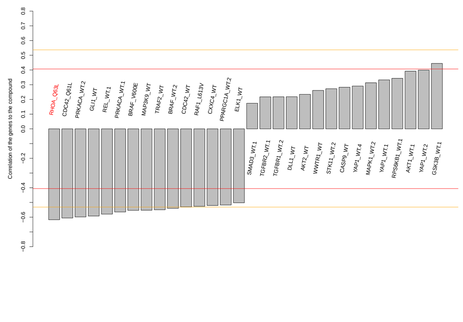
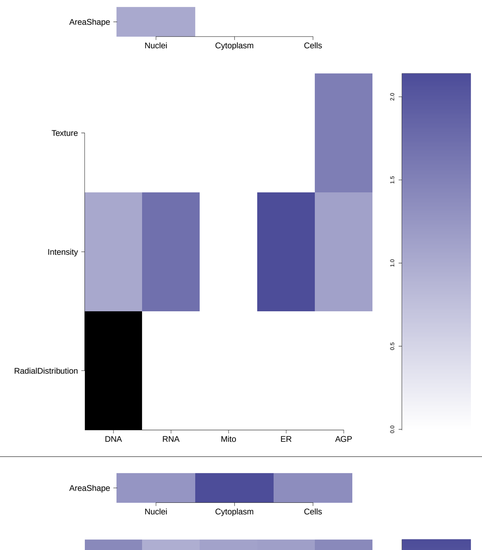
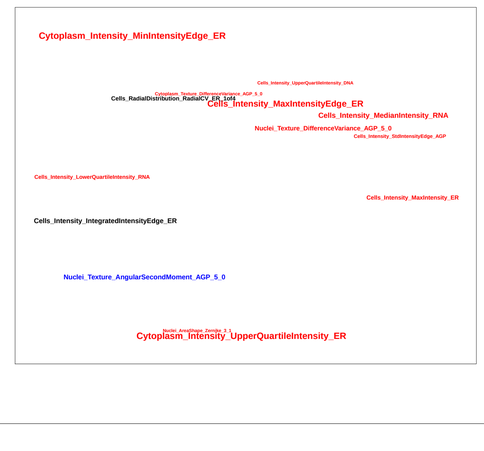
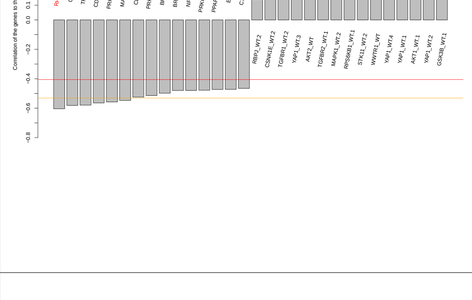
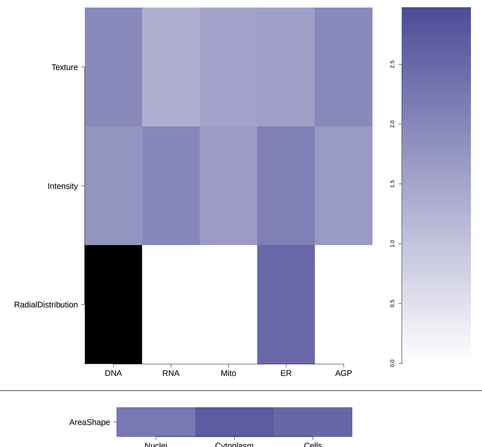
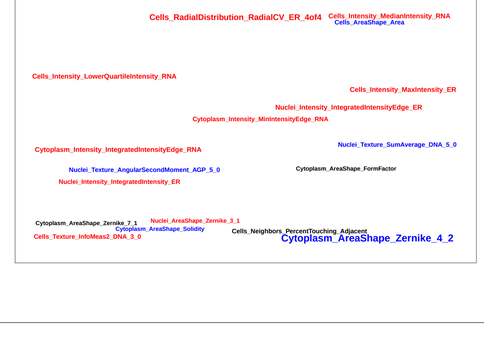
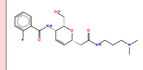
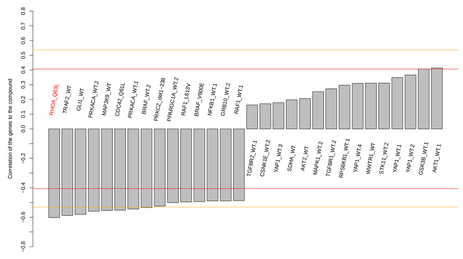
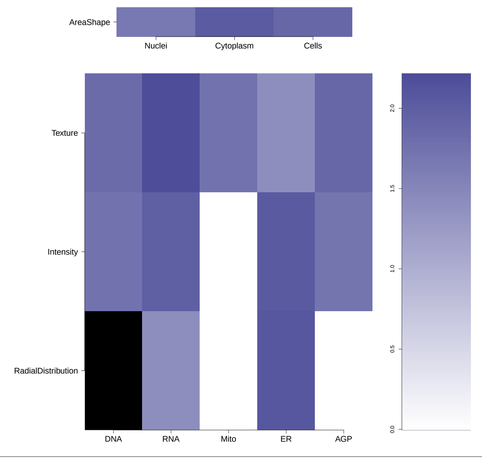


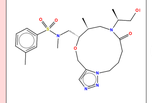
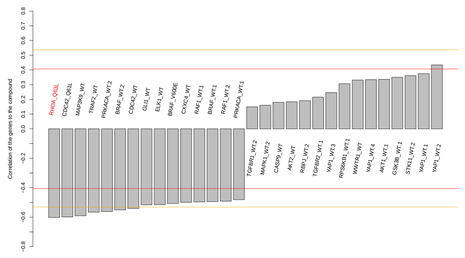
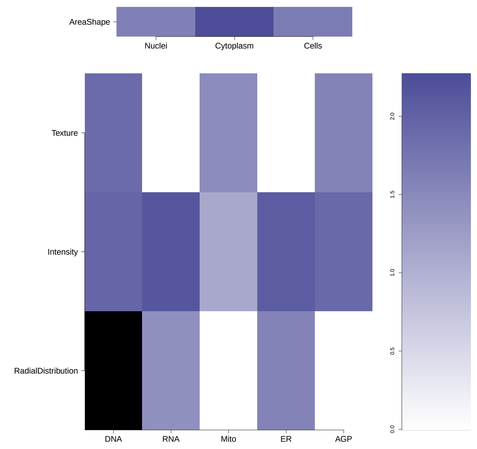
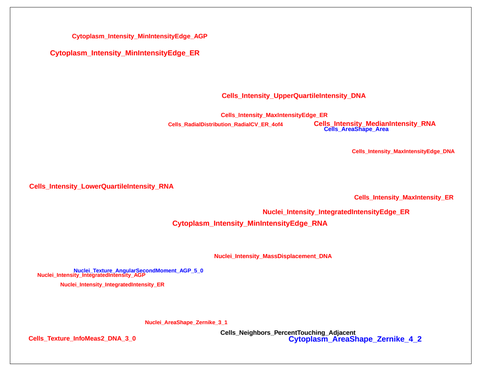


Total number of assays tested in: 795. Active in the following assays:

- Pyruvate Kinase (AID 361)
- qHTS Assay for Inhibitors of Firefly Luciferase (AID 411)
- qHTS Assay for Spectroscopic Profiling in A350 Spectral Region (AID 590)
- qHTS Assay for Inhibitors of HSD17B4, hydroxysteroid (17-beta) dehydrogenase 4 (AID 893)
- 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)
- Leishmania major promastigote HTS (AID 1063)
- Primary screen for compounds that inhibit Insulin promoter activity in TRM-6 cells (AID 1273)
- High throughput screening of inhibitors of transient receptor potential cation channel C6 (TRPC6) (AID 2553)
- Counter screen for compounds that modulate transient receptor potential cation channel C6 (TRPC6) (AID 488924)
- Specificity screen against TRPC4 for compounds that modulate transient receptor potential cation channel C6 (TRPC6) (AID 488927)
- Primary cell-based screen for identification of compounds that allosterically activate the Choline Transporter (CHT) (AID 488977)
- 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)

BRD-K19368354-001-06-4 SMR000082230 AC1M3F6G MLS000100236 MLS002548559 HMS2279B19 ZINC2884431 ZINC02884431 ST50753752 F3083-0201 PubChem CID : 2236768		0.56 (in 4 replicates)	0.55	NA				Total number of assays tested in: 789. Active in the following assays: • CYP2C9 Assay (AID 777) • CYP2C19 Assay (AID 778) • Screen for Chemicals that Inhibit the RAM Network (AID 868) • Chemical Genetic Screen to Identify Inhibitors of Mitochondrial Fusion - Primary Screen (AID 1362) • Primary cell-based high-throughput screening assay to identify agonists of the transient receptor potential channel ML3 (TRPML3) (AID 1448) • Counterscreen assay for TRPML3 agonists: cell-based high-throughput screening assay to identify agonists of the transient receptor potential channel N1 (TRPN1) (AID 1525) • Confirmation cell-based high-throughput screening assay for agonists of the transient receptor potential channel ML3 (TRPML3) (AID 1526) • Primary cell-based high-throughput screening assay for identification of compounds that inhibit KCNQ1 potassium channels (AID 2642) • Primary qHTS for delayed death inhibitors of the malarial parasite plastid, 48 hour incubation (AID 504832) • Validation (re-confirmation) assay for identification of compounds that inhibit KCNQ1 potassium channels (AID 588353) • Primary cell-based high-throughput screening for identification of compounds that inhibit/block calcium-activated chloride channels (TMEM16A) (AID 588511) • uHTS identification of small molecule inhibitors of the mitochondrial permeability transition pore via an absorbance assay (AID 602449) • Primary cell-based high-throughput screening for identification of compounds that activate/potentiate calcium-activated chloride channels (TMEM16A) (AID 623877) • qHTS of GLP-1 Receptor Inverse Agonists (Inhibition Mode) (AID 624417) • Dose response confirmation of uHTS inhibitor hits of the mitochondrial permeability transition pore via a fluorescent based counterscreen assay (AID 651564) • Specificity screen against KCNQ2 for identification of compounds that inhibit KCNQ1 potassium channels (AID 651746) • Specificity screen against KCNQ1/KCNE1 for identification of compounds that inhibit KCNQ1 potassium channels (AID 652147) • qHTS for Inhibitors of human tyrosyl-DNA phosphodiesterase 1 (TDP1): qHTS in cells in absence of CPT (AID 686978)
BRD-K04148681-001-05-3 ZINC00533866 AC1LD9MR MLS000040989 HMS2445P16 ZINC533866 STL237632 SMR000044205 PubChem CID : 663511		0.54 (in 3 replicates)	0.55	NA				Total number of assays tested in: 774. 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) • Cell signaling CRE-BLA (Fsk stim) (AID 662) • 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) • Primary qHTS for delayed death inhibitors of the malarial parasite plastid, 96 hour incubation (AID 504834) • Counterscreen for inhibitors of the fructose-bisphosphate aldolase (FBA) of M. tuberculosis: Absorbance-based biochemical high throughput Glycerophosphate Dehydrogenase-Triosephosphate Isomerase (GDH-TPI) full deck assay to identify assay artifacts (AID 588335) • Fluorescence-based biochemical primary high throughput screening assay to identify inhibitors of the fructose-bisphosphate aldolase (FBA) of M. tuberculosis (AID 588726) • Counterscreen of compound fluorescence effects on High-throughput multiplex microsphere screening for inhibitors of toxin protease (AID 624483) • Fluorescence-based biochemical high throughput confirmation assay for inhibitors of the fructose-bisphosphate aldolase (FBA) of M. tuberculosis (AID 651616) • qHTS Assay for Activators of ClpP (AID 651965) • 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) • 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-A62995832-001-05-6 MLS000588022 SMR000212022 AC1NZ9D7 BDBM83208 STK745341 PubChem CID : 5928021		0.52 (in 4 replicates)	0.54	NA				Total number of assays tested in: 637. Active in the following assays: • VP16 counterscreen qHTS for inhibitors of ROR gamma transcriptional activity (AID 2546) • qHTS Assay for Small Molecule Inhibitors of Mitochondrial Division or Activators of Mitochondrial Fusion (AID 485298) • Elucidation of physiology of non-replicating, drug-tolerant Mycobacterium tuberculosis (AID 488890) • uHTS identification of small molecule antagonists of the CCR6 receptor via a luminescent beta-arrestin assay (AID 493098) • Nrf2 qHTS screen for inhibitors (AID 504444) • SAR analysis of small molecule antagonists of the CCR6 receptor: a luminescent beta-arrestin assay (AID 540334) • qHTS Assay for Small Molecule Inhibitors of Mitochondrial Division or Activators of Mitochondrial Fusion: Hit Validation in Malachite Green Assay (AID 602289) • qHTS of alpha-syn Inhibitors (AID 652106) • 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)
BRD-K58469266-001-01-0 PubChem CID : 54646063		NA (in 1 replicates)	-0.70	0.668				Total number of assays tested in: 39.
BRD-K96634415-001-01-3 PubChem CID : 54646028		NA (in 1 replicates)	-0.68	0.637				Total number of assays tested in: 38.

BRD-K61437861-001-01-1 PubChem CID : 54646478		0.75 (in 3 replicates)	-0.66	0.396				Total number of assays tested in: 36.
BRD-K21799195-001-04-4 AC1M1XGQ MLS000419252 HMS2250M07 ZINC12514144 SMR000319880 PubChem CID : 2157974		NA (in 1 replicates)	-0.65	NA				Total number of assays tested in: 629. Active in the following assays: • Leishmania major promastigote HTS (AID 1063) • qHTS Assay for Antagonists of the Neuropeptide S Receptor: cAMP Signal Transduction (AID 1461) • uHTS identification of small molecule inhibitors of tim10-1 yeast via a luminescent assay (AID 463190) • Primary cell-based screen for identification of compounds that inhibit the two-pore domain potassium channel KCNK9 (AID 488922)
BRD-K74659043-001-01-6 PubChem CID : 54646039		NA (in 1 replicates)	-0.65	0.852				Total number of assays tested in: 41.
BRD-K84787606-001-01-2 PubCID : 54646041		NA (in 1 replicates)	-0.63	0.171				Total number of assays tested in: 40.
BRD-K97492549-001-01-4 PubChem CID : 54618432		0.69 (in 4 replicates)	-0.62	0.421				Total number of assays tested in: 34.
BRD-K72739597-001-01-8 PubChem CID : 54646311		0.74 (in 4 replicates)	-0.60	0.323				Total number of assays tested in: 35. Active in the following assays: • HTS for PAX8 inhibitors using PAX8 luciferase reporter gene assay in RMG-I cells Measured in Cell-Based System Using Plate Reader - 7054-01_Inhibitor_SinglePoint_HTS_Activity (AID 652154)
BRD-K66207462-001-01-6 PubChem CID : 54640492		0.74 (in 4 replicates)	-0.60	0.245				Total number of assays tested in: 36.

BRD-K90756713-001-01-9 PubChem CID : 44505951		0.55 (in 3 replicates)	-0.60	0.750				Total number of assays tested in: 44.