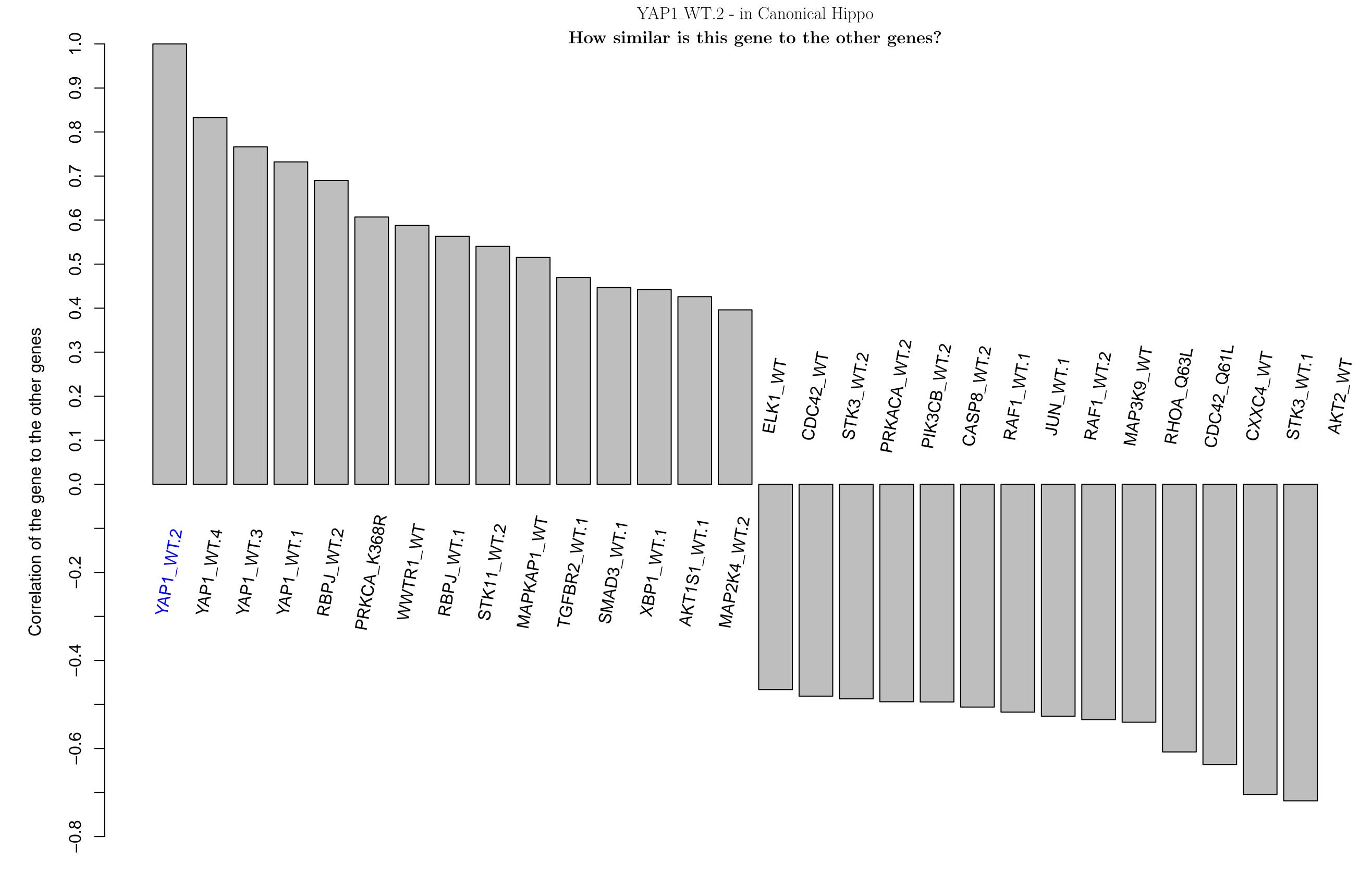
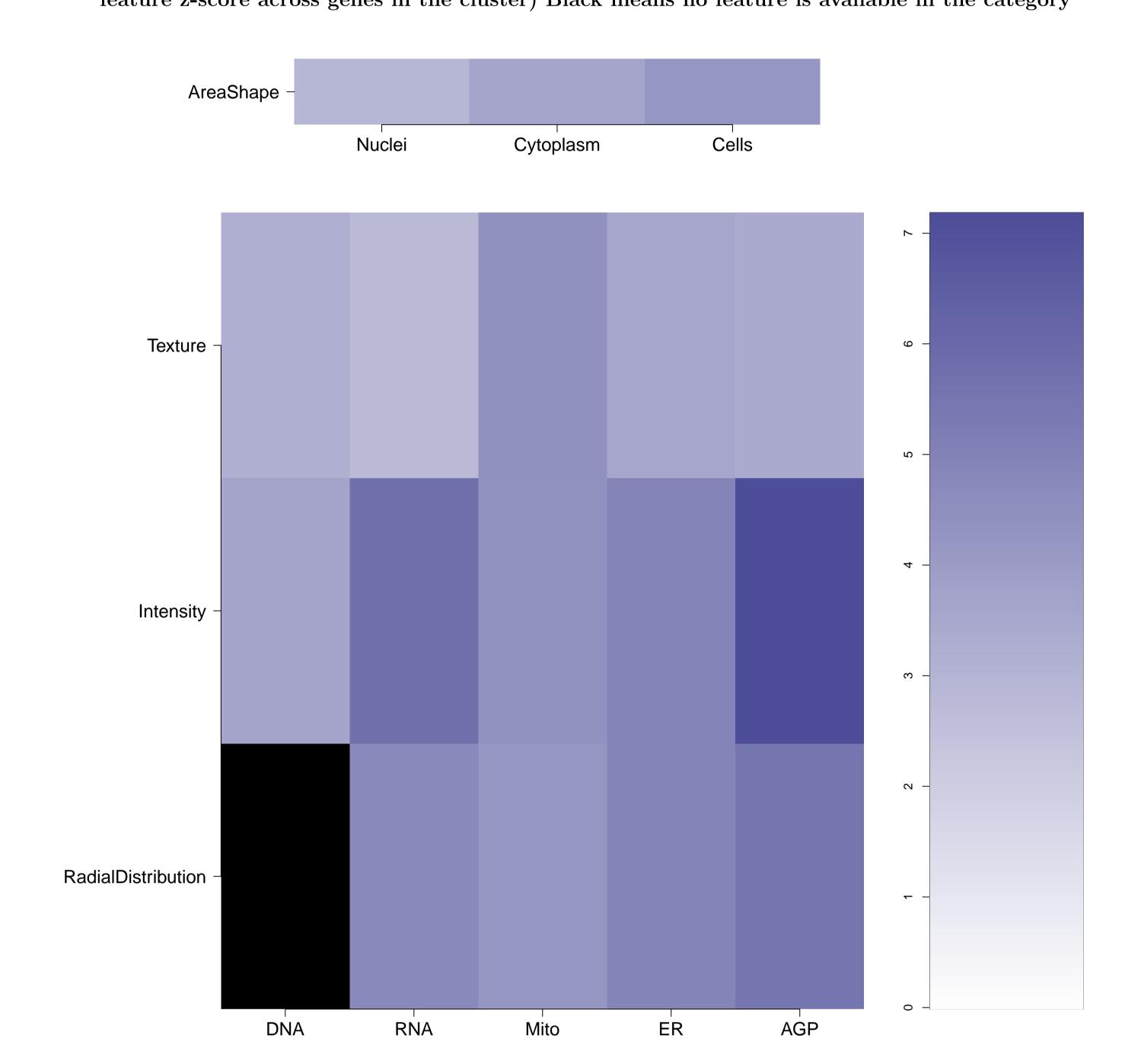
CONFIDENTIAL, contact the Imaging Platform to collaborate on the findings herein



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

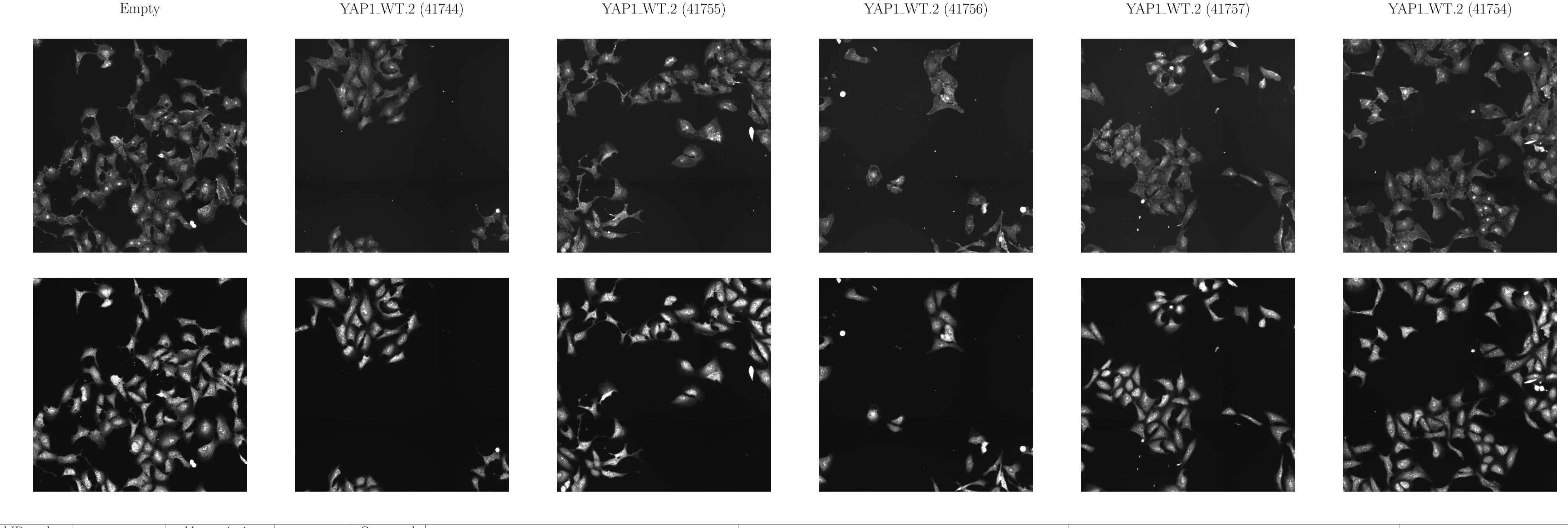


AGP

RNA

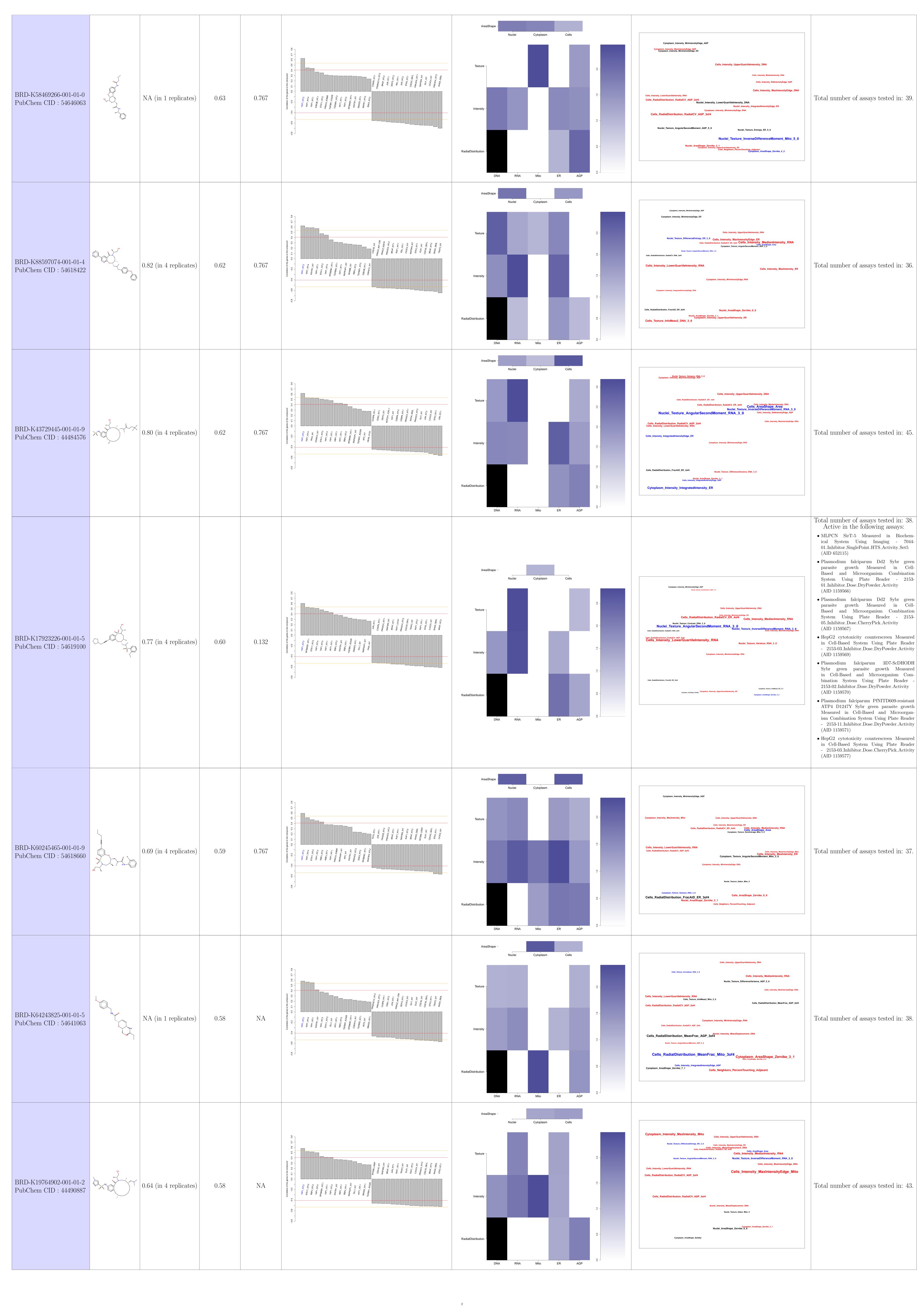
Which individual morphological features are distinguishing in the gene relative to the untreated samples? Blue/Red means the feature has a positive/negative z-score. Size is proportional to the z-score value.

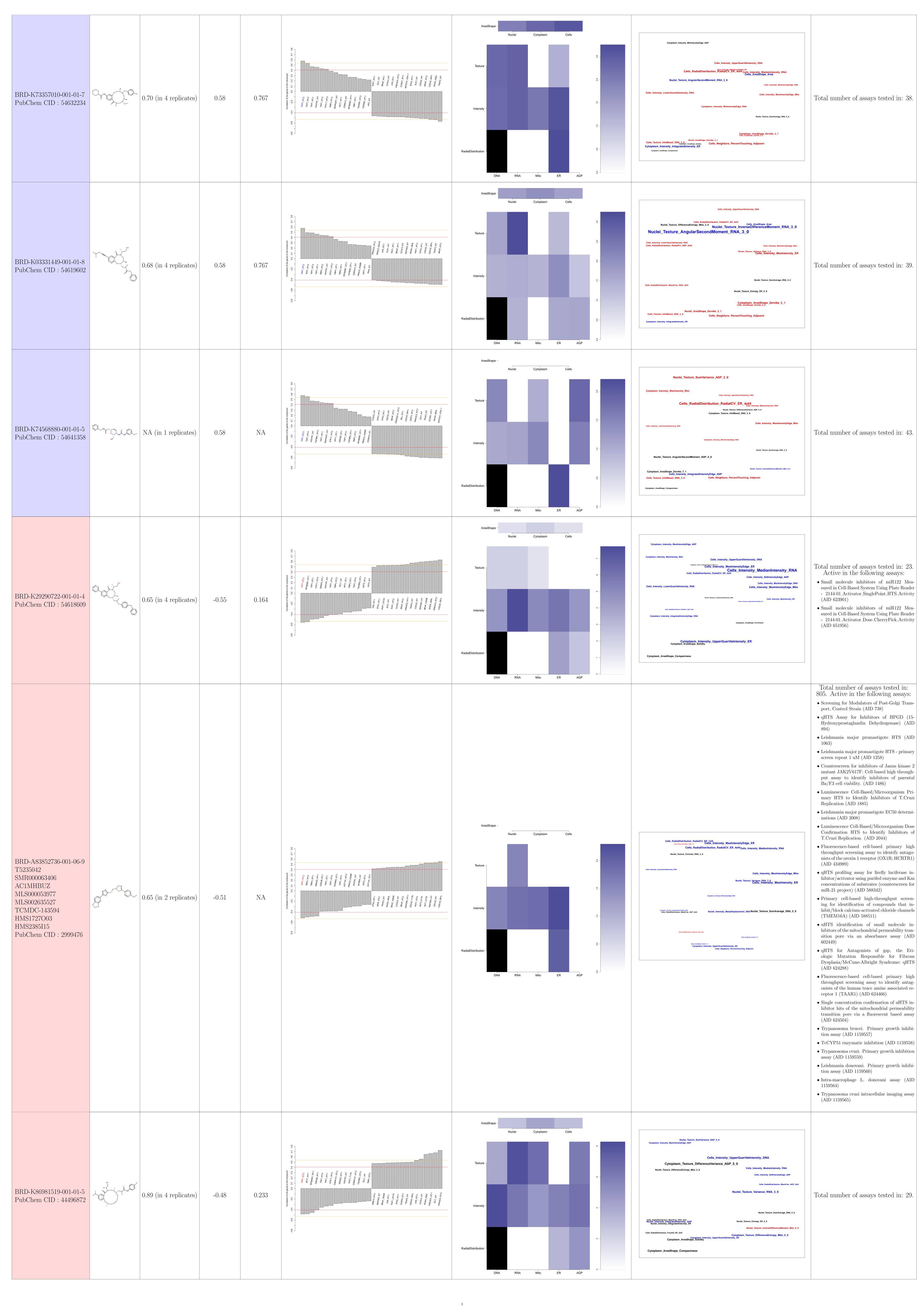


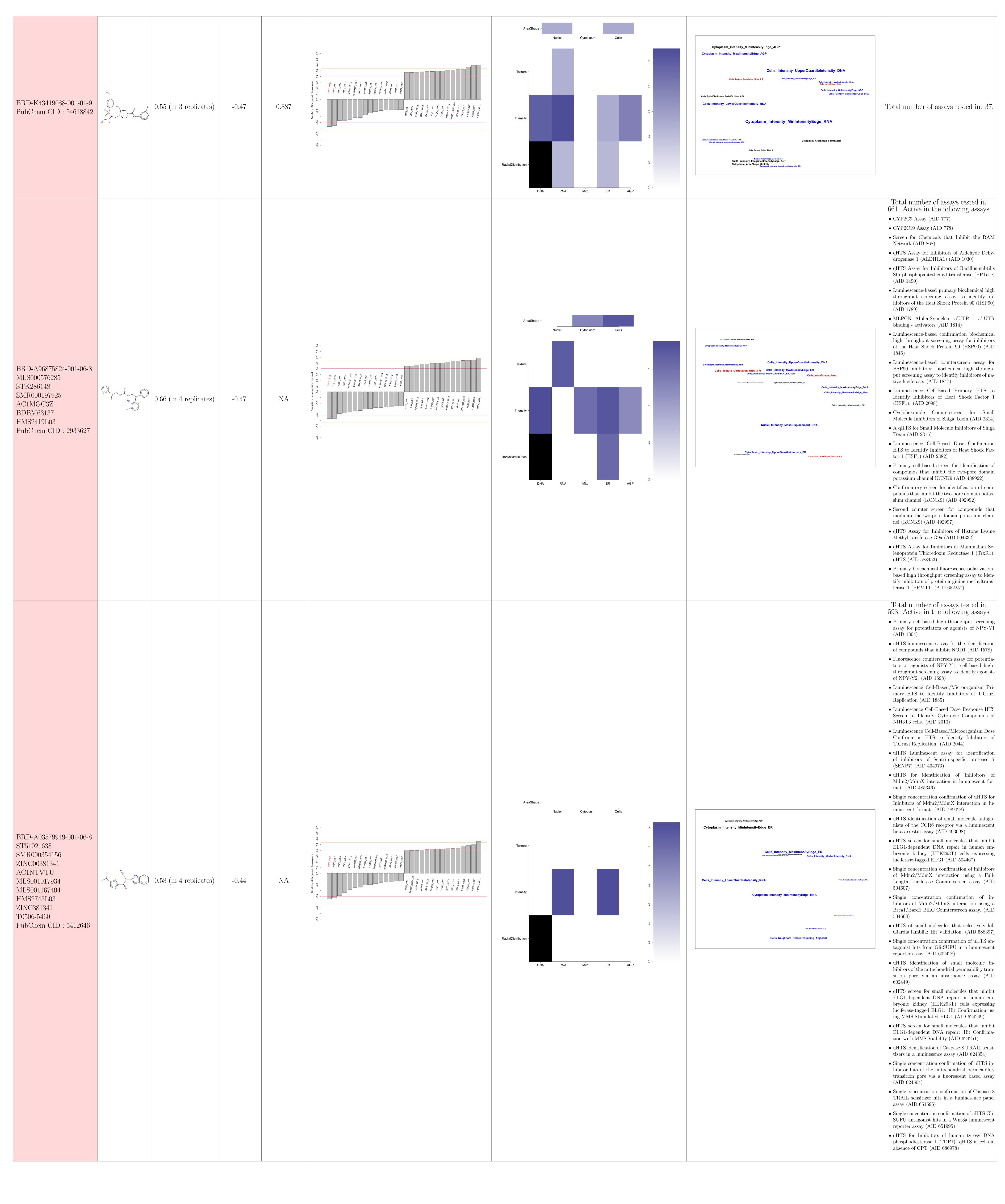


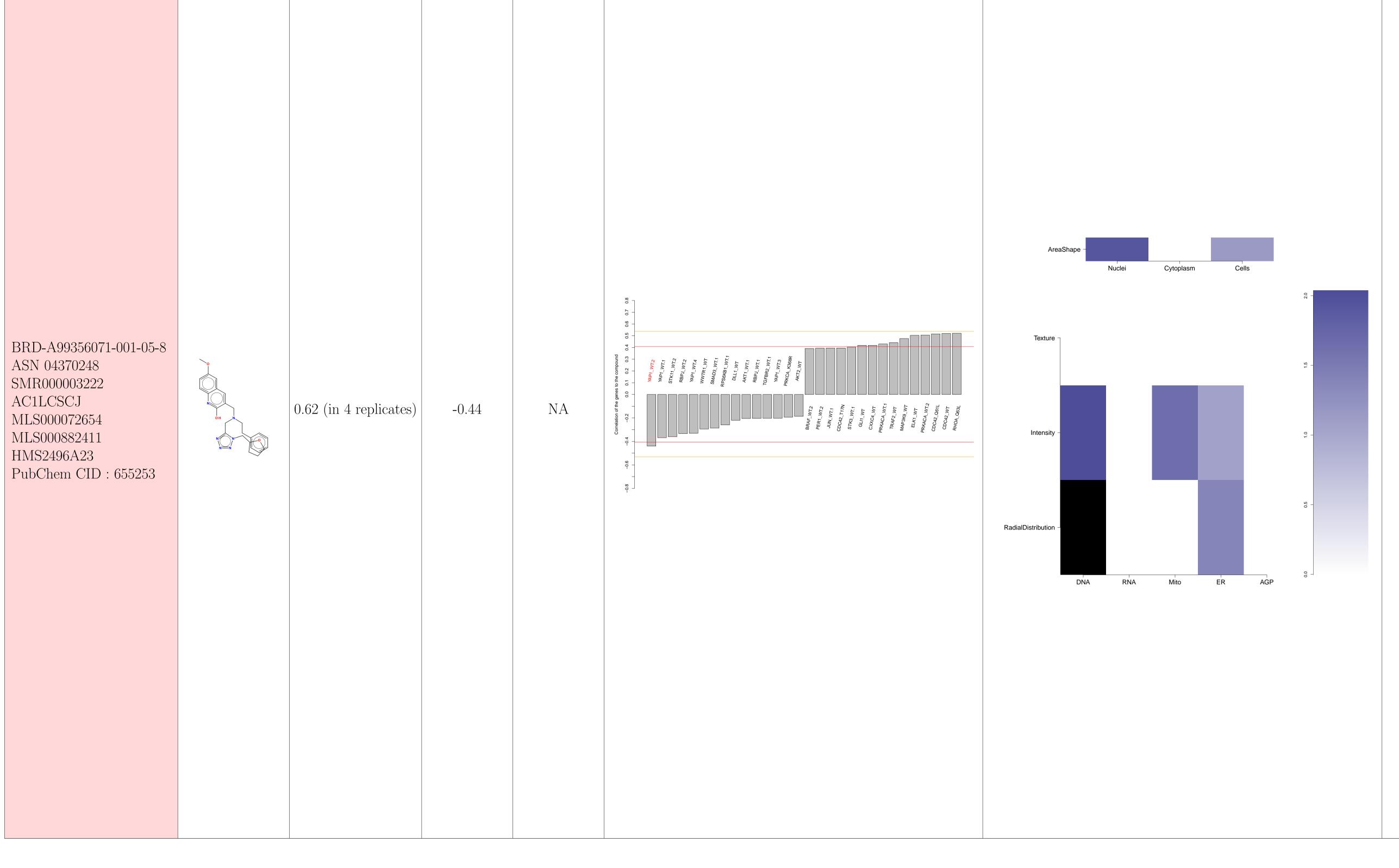
Compound IDs and Compound Mean pairwise rank when replicates common names (where Correlation Distinguishing individual features for the compound relative to Number of PubChem assays in which How similar is the compound signature to the genes in this available); blue/red colored correlation of the scored Chemical Common distinguishing feature categories in the compound and between untreated samples. Black means a mismatch; i.e. active (= high the compound was tested; assays in experiment? (Yellow and red lines correspond to top/bottom box means the matching against the compound signature compound the gene relative to the untreated samples z-score in magnitude) in the compound, and either inactive (= which the compound was active are structure compound is (95th DMSO 1st and 5th percentile DMSO correlation to all the genes) gene using small z-score in magnitude) or oppositely active in the gene the gene itemized positively/negatively replicate correlation L1000 correlated with the cluster is 0.53) profiling

1









Cytoplasm\_Intensity\_MinintensityEdge\_AGP

Redux\_Teners\_Internativy\_MaintensityEdge\_AGP

Cytoplasm\_Intensity\_Maintensity\_Mito

Cells\_Intensity\_UpperQuartileIntensity\_DNA

Cells\_RadialDistribution\_RadialCV\_ER\_4of4

Cells\_AreaShape\_Area

Cells\_AreaShape\_Area

Cells\_Intensity\_MaxIntensityEdge\_Mito

Cytoplasm\_Teners\_Maybridge\_Mito

Cytoplasm\_Teners\_Area\_intensity\_MaxIntensityEdge\_Mito

Cytoplasm\_Teners\_Area\_intensity\_MaxIntensity\_ER

Nuclei\_Intensity\_MassDisplacement\_DNA

Nuclei\_Intensity\_MassDisplacement\_DNA

Cells\_RadialDistribution\_MeanFrac\_Mito\_3of4

Cytoplasm\_Texture\_InfoMeas2\_ER\_5\_0

Cytoplasm\_Texture\_InfoMeas2\_ER\_5\_0

- Total number of assays tested in: 775. Active in the following assays:

   qHTS Assay for Spectroscopic Profiling in 4-MU Spectral Region (AID 589)
  - MU Spectral Region (AID 589)

     qHTS Assay for Spectroscopic Profiling in A350
    Spectral Region (AID 590)
  - Human H69AR Lung Tumor Cell Growth Inhibition Assay 86K Screen (AID 598)
  - Profiling the NIH Molecular Libraries Small Molecule Repository: Autofluorescence at 339/460 nm (AID 709)
  - 339/460 nm (AID 709)
     CYP2C19 Assay (AID 778)
  - qHTS Assay for Inhibitors of Bacillus subtilis Sfp phosphopantetheinyl transferase (PPTase) (AID 1490)
  - qHTS Assay for Inhibitors of Fructose-1,6bisphosphate Aldolase from Giardia Lamblia: Coupling assay counterscreen (AID 2472)
  - qHTS Assay for Inhibitors of Histone Lysine Methyltransferase G9a (AID 504332)
  - uHTS identification of small molecule modulators of myocardial damage (AID 588492)
     Dose response confirmation of uHTS hits for
  - Dose response confirmation of uHTS hits for small molecule modulators of myocardial damage (AID 588779)
  - 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)
  - Fluorescence-based cell-based primary high throughput confirmation assay to identify agonists of the human trace amine associated receptor 1 (TAAR1) (AID 651783)
  - Counterscreen for agonists of the human trace amine associated receptor 1 (hTAAR1): Fluorescence-based cell-based high throughput screening assay to identify hTAAR1 agonists
  - that also desensitize TAAR1 receptor response.
    (AID 651951)
    Counterscreen for agonists of the human trace amine associated receptor 1 (hTAAR1):
    Fluorescence-based cell-based high throughput screening assay to identify nonselective Ga16
  - qHTS Assay for Activators of ClpP (AID 651965)

antagonists (AID 651952)

- 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)