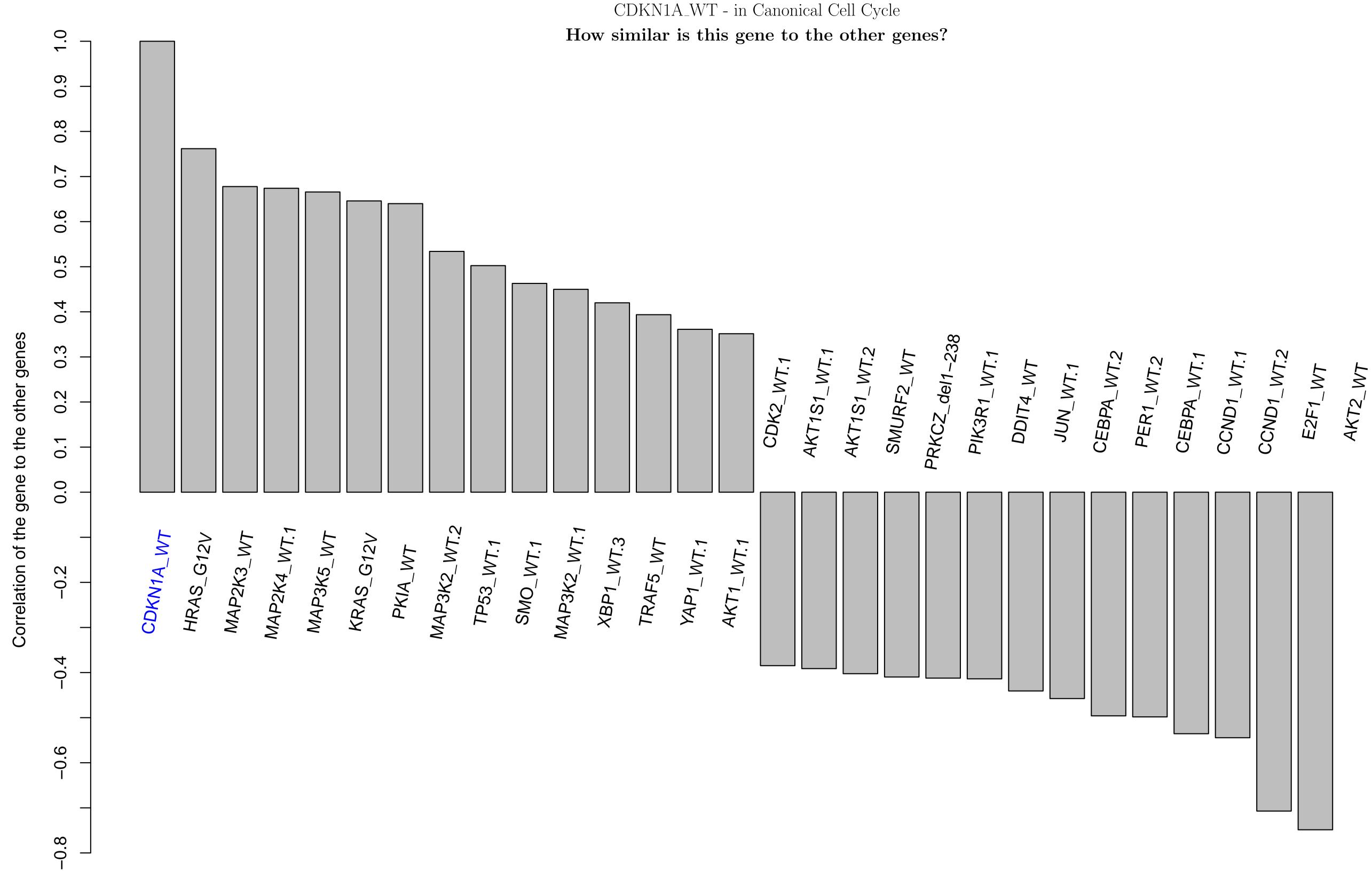
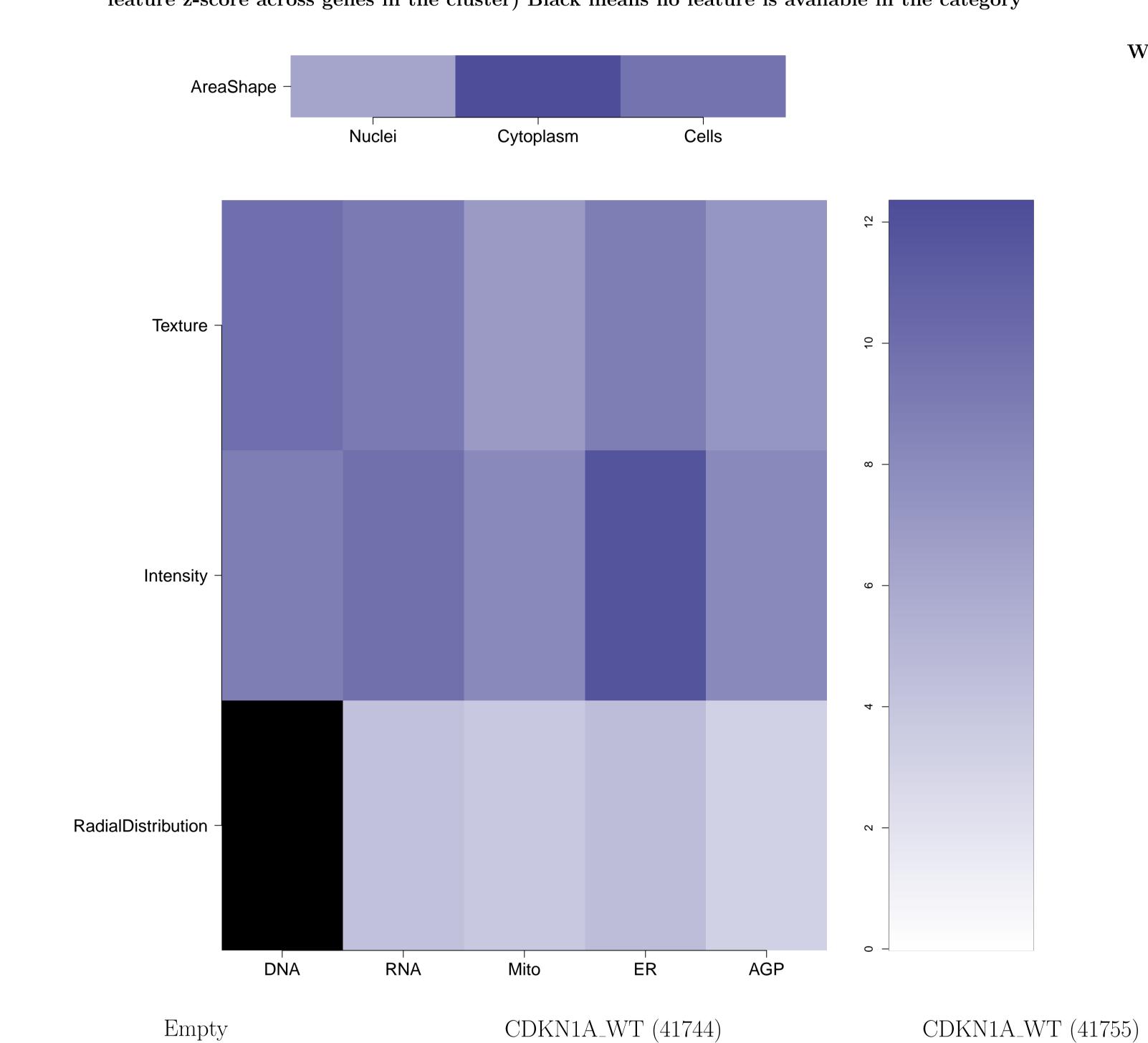
CONFIDENTIAL, contact the Imaging Platform to collaborate on the findings herein



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



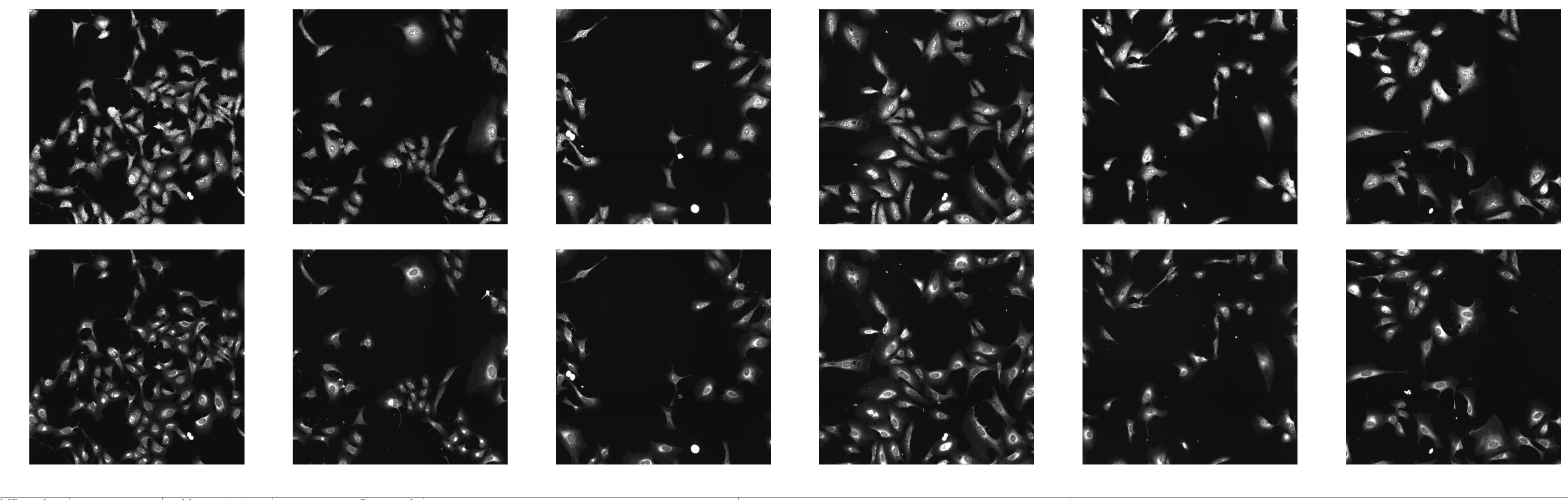
Which individual morphological features are distinguishing in the gene relative to the untreated samples? Blue/Red means the feature has a positive/negative z-score. Size is proportional to the z-score value.

 $CDKN1A_WT$  (41757)

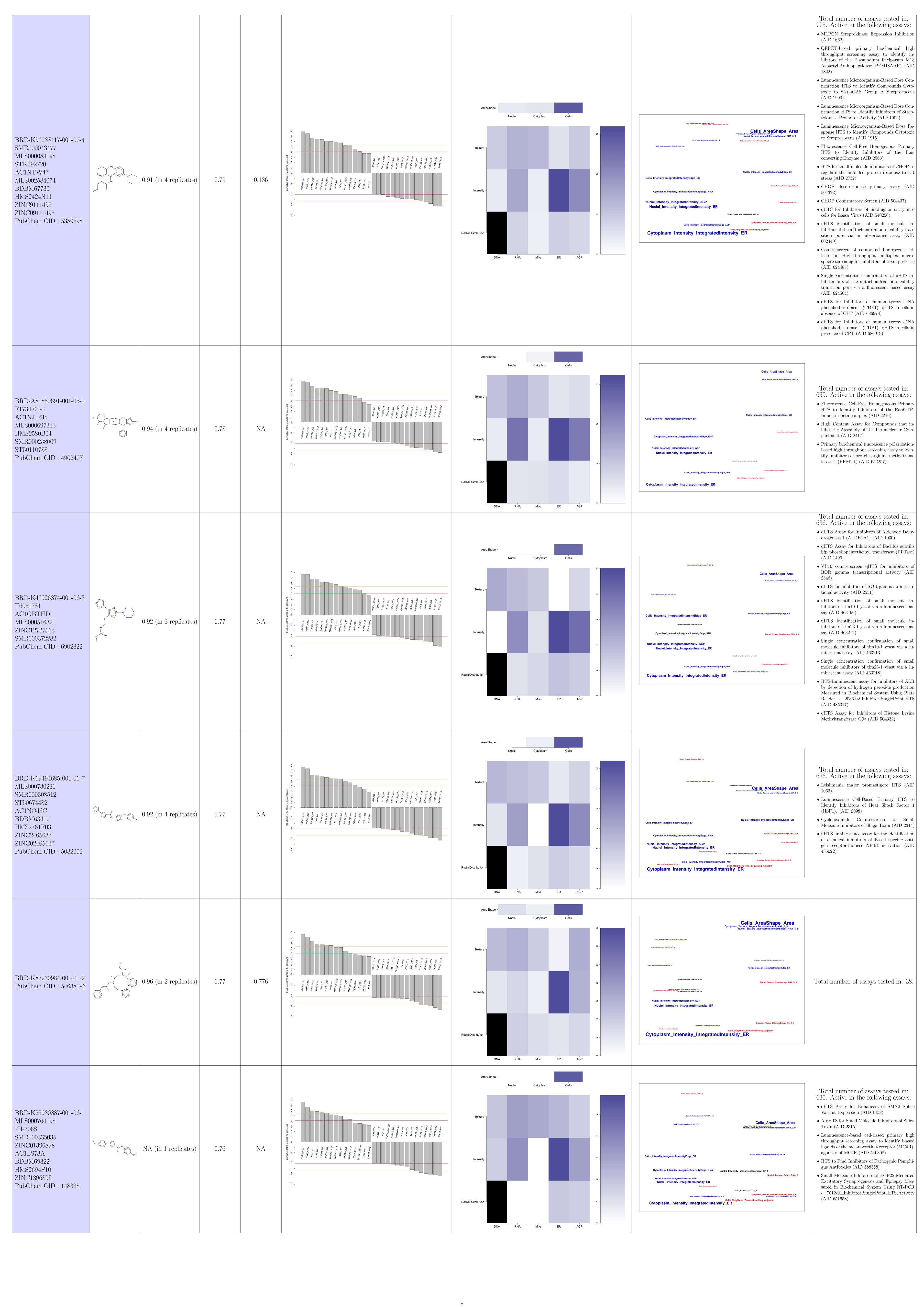
 $CDKN1A_WT$  (41754)

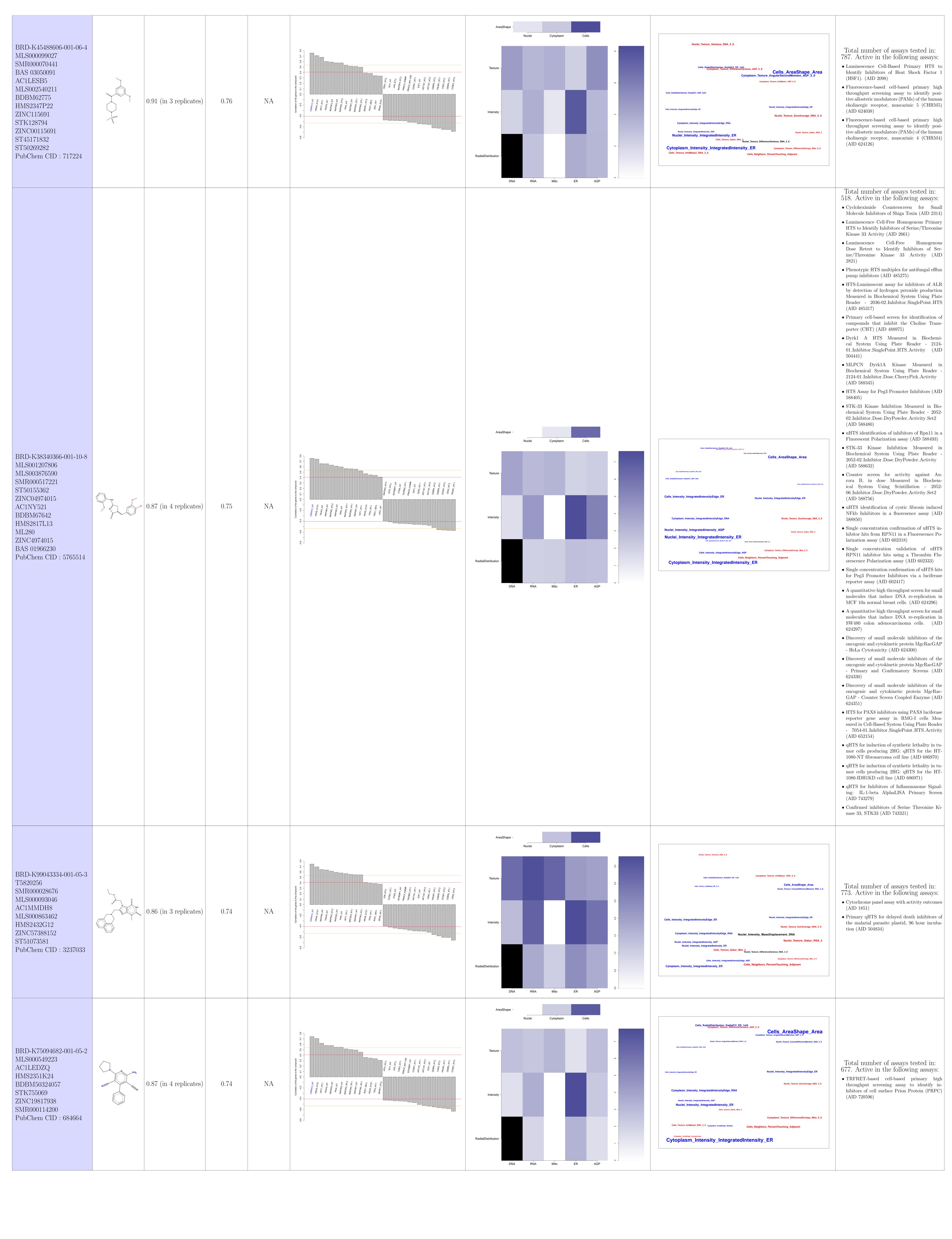


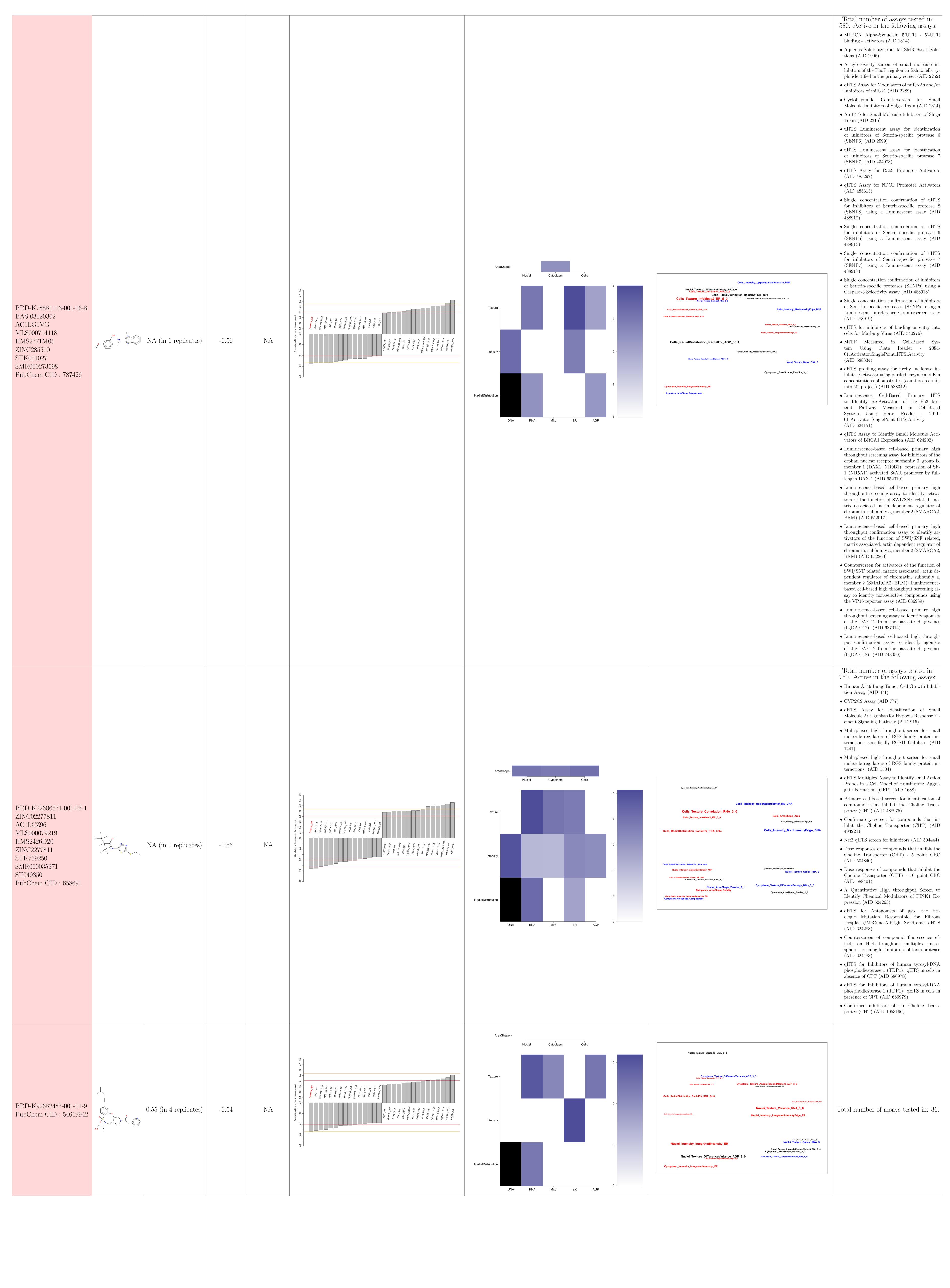
 $CDKN1A_{-}WT (41756)$ 

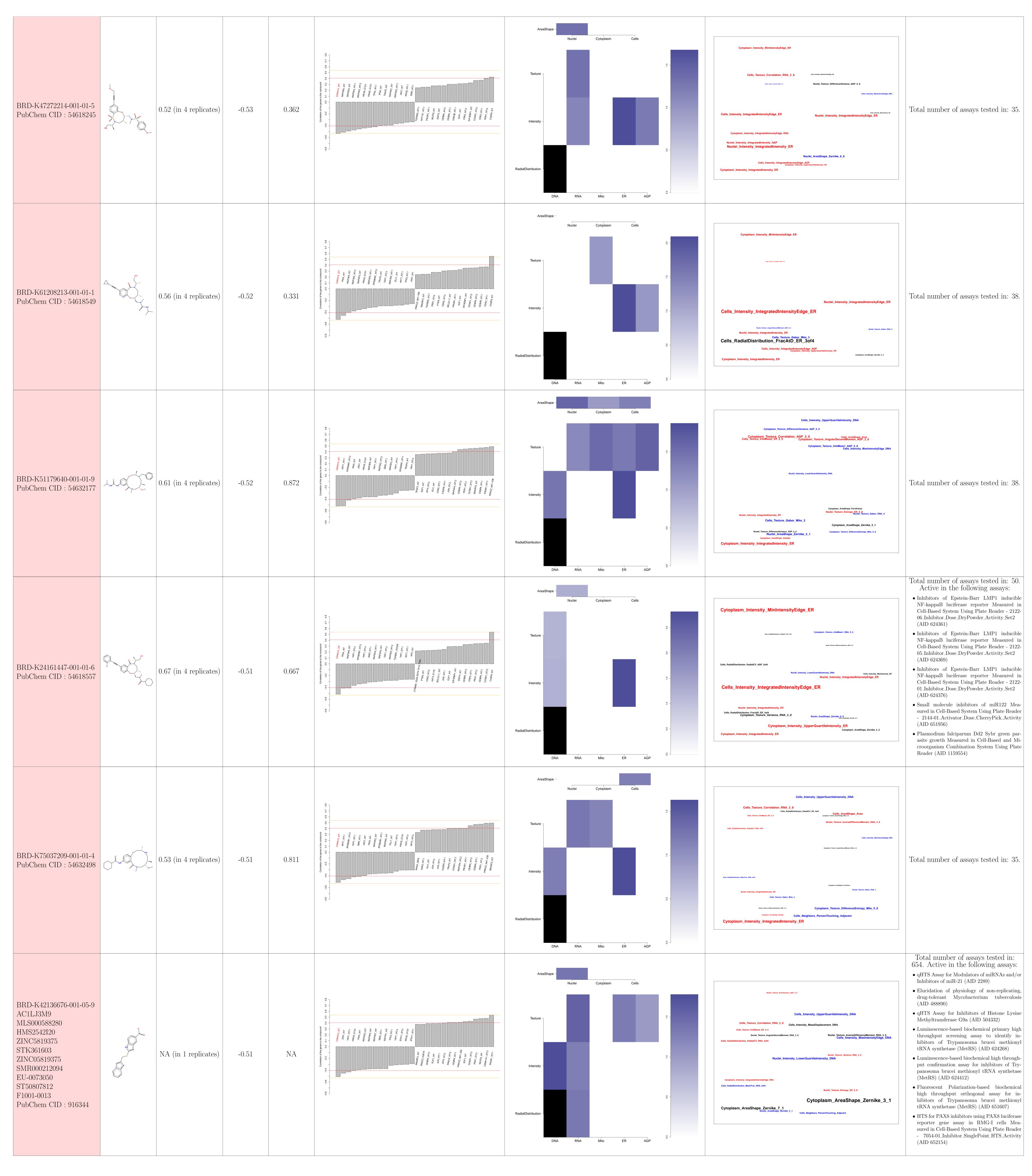


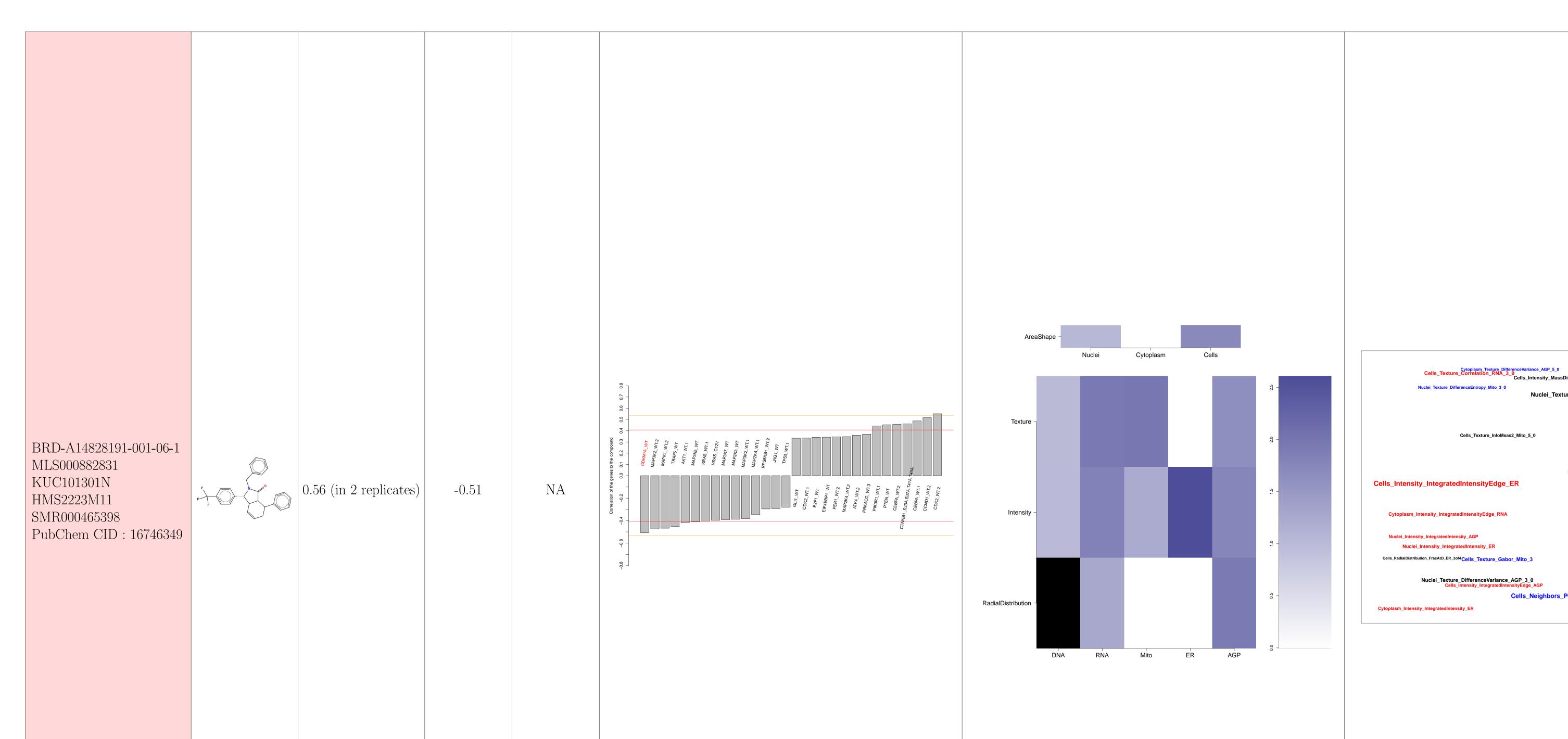
Compound IDs and common names (where available); blue/red colored box means the matching compound is positively/negatively correlated with the cluster	Chemical structure	Mean pairwise replicates correlation of the compound signature (95th DMSO replicate correlation is 0.52)	Correlation between compound 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)	$\perp$ Common distinctiishing teature categories in the compound and	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	compound was tested; assays in
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- Total number of assays tested in: 557. Active in the following assays: • qHTS Assay for Antagonists of the Neuropep
  - tide S Receptor: cAMP Signal Transduction (AID 1461) • Primary cell-based high-throughput screening

assay for identification of compounds that inhibit KCNQ2 potassium channels (AID 2156)

- qHTS Assay for Lipid Storage Modulators in Drosophila S3 Cells (AID 2685) • Luminescence Cell-Based Dose Retest to Confirm Inhibitors of Cancer Stem Cells (AID
- 449748) • Dose Response HTS Screen to Identify Cytotoxic Compounds of HMLE\_sh\_eGFP (AID
- uHTS identification of small molecule in-
- hibitors of tim10-1 yeast via a luminescent assay (AID 463190) • uHTS identification of small molecule in-
- hibitors of tim10 yeast via a luminescent assay (AID 463195)• uHTS identification of small molecule in-
- hibitors of tim23-1 yeast via a luminescent assay (AID 463212)
- Single concentration confirmation of small molecule inhibitors of tim10-1 yeast via a lu-
- minescent assay (AID 463213) • Single concentration confirmation of small molecule inhibitors of tim10 yeast via a lumi-
- nescent assay (AID 463215) • Single concentration confirmation of small
- molecule inhibitors of tim23-1 yeast via a luminescent assay (AID 463218)
- uHTS for identification of Inhibitors of Mdm2/MdmX interaction in luminescent for-
- mat. (AID 485346) • Single concentration confirmation of uHTS for
- Inhibitors of Mdm2/MdmX interaction in luminescent format. (AID 489028)
- Single concentration confirmation of inhibitors of Mdm2/MdmX interaction using a Full-Length Luciferase Counterscreen assay (AID
- 504607)• Single concentration confirmation of inhibitors of Mdm2/MdmX interaction using a
- Brca1/Bard1 BiLC Counterscreen assay. (AID 504668)• Primary qHTS for delayed death inhibitors of

the malarial parasite plastid, 48 hour incuba-

- tion (AID 504832) • Primary cell-based high-throughput screening for identification of compounds that in-
- hibit/block calcium-activated chloride channels (TMEM16A) (AID 588511) • qHTS Fluorescence Polarization (FP) Assay for

Inhibitors of MLL CXXC domain - DNA inter-

action: Fluorescein FP (AID 624160) • qHTS for Inhibitors of ATXN expression (AID

651635)

• qHTS for Inhibitors of human tyrosyl-DNA phosphodiesterase 1 (TDP1): qHTS in cells in presence of CPT (AID 686979)