Release Notes

BaseSpace Correlation Engine v2.0

November 04, 2020

INTRODUCTION

These Release Notes detail the latest release of BaseSpace Correlation Engine, including known issues.

BaseSpace Correlation Engine provides an interface with tools and content for exploratory, preclinical, and early translational research in drug discovery and biotechnology research. The software is a multidimensional integration platform designed to search and correlate global collections of heterogeneous, large-scale experimental data across diverse platforms, organisms, and therapeutic areas.

FEATURES

This release contains the following features:

- Deployment of application to Amazon Web Serves (AWS)
- Gene models have been updated to the following versions:
  - Entrez 2018-01-01
  - GenBank v224
  - RefSeq v87
  - UniProt 2018-01
  - Homologene v68
  - MGI Vertebrate Homology 2018-02
- Biogroups have been updated based on the following resources:
  - Gene Ontology 2018-07-23
  - MsigDB v6.2
    - Updated
      - Regulatory motifs
      - Canonical pathways
      - Positional gene sets
    - Added
      - Hallmark gene sets
      - Chemical and genetic perturbations
      - Cancer gene neighborhoods
      - Cancer modules
      - Oncogenic signatures
      - Immunologic signatures
  - InterPro v69
- Gene expression platform technology updates
  - 128 existing platforms refreshed with revised feature-mapping information
  - 15 new gene expression platforms supported
    - Illumina HumanHT-12 WG-DASL V4.0 R2 expression beadchip
    - Affymetrix Human Gene Expression Array - PrimeView
    - Affymetrix Human Gene 2.0 ST Array - HuGene-2_0-st - transcript (gene) version
    - Affymetrix Human Transcriptome Array 2.0 - HTA-2_0 - transcript (gene) version
    - Agilent-039494 SurePrint G3 Human GE v2 8x60K Microarray 039381 (Feature Number version)

- Agilent-039494 SurePrint G3 Human GE v2 8x60K Microarray 039381 (Probe Name version)
- Affymetrix Mouse Gene 2.1 ST Array [transcript (gene) version]
- Affymetrix Mouse Gene 2.0 ST Array [transcript (gene) version]
- Agilent-028005 SurePrint G3 Mouse GE 8x60K Microarray (Probe Name version)
- Agilent-028005 SurePrint G3 Mouse GE 8x60K Microarray (Feature Number version)
- Affymetrix Rat Gene 1.0 ST Array [transcript (gene) version]
- BioSpyder TempO-Seq
- Custom Human
- Custom Mouse
- Custom Rat
- Agilent-072363 SurePrint G3 Human GE v3 8x60K array (Feature Number version)
- Agilent-072363 SurePrint G3 Human GE v3 8x60K array (Probe Name version)

Resolved Issues

- Security Fixes
- Browser back button does not properly refresh page in any atlas
- Biogroup Size filter not applied when exporting bioset-bigroup search results

Known Issues

- Genome build conversion is temporally disabled. As a result, datasets based on genomic coordinates can only be accepted from NCBI build 36/UCSC hg18, NCBI build 37/UCSC mm9, NCBI RGSC v3.4/UCSC rn4, NCBI WS190/UCSC ce6, NCBI release 5.2.UCSC dm3, NCBI build 2.1/UCSC sacCer2, NCBI build 1.1/UCSC rheMac2, NCBI build 2.1/UCSC galGal3, NCBI build 2.1/UCSC panTro2, NCBI Btau_4.0/UCSC bosTau4, NCBI Zv8/UCSC danRer6, NCBI build 2.1/UCSC canFam2
- miRNA dataset import temporarily disabled
- Non-human species datasets temporarily not available when browsing some MsigDB biogroups.
- Data filter does not return cell line results when filtering for copy number or somatic mutations in Cell Lines - Body Atlas
    - Work around: Browse for Body Atlas cell lines where CNV or SM data is present and open up individual datasets to inspect
- Export from Active Biogroups times out in studies with more than 20 biosets
    - Work around: Add biosets to Meta-analysis in smaller batches and export from Biogroup Results tab in Meta-analysis
- Region filter temporarily not present for Histone Ubiquitination, Histone Acetylation, Histone Methylation bio set inspectors.