Release Notes for BAO\_merged version 2.3.1

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### Document Public Location:

[http://www.bioassayontology.org/bao](http://www.bioassayontology.org/bao/bao_complete.owl)

### About BAO

The BioAssay Ontology (BAO) has been developed to formally describe biological screening assays and their results including high-throughput screening (HTS) data; specifically in the domain of small molecule drug and probe development. BAO enables categorization of assays and results by based on several concepts that are important to interpret and analyze screening data with the goal to infer the mechanism of action of small molecules based on the known aggregate screening results from many assays.

BAO\_merged.owl file is created to provide a user-friendly, comprehansive version of BAO that contains the vocabulary and axioms. BAO’s modular architecture provides separate files for vocabulary, external ontologies, and axioms (please see the release notes for BAO for a complete list of files). The BAO\_merged.owl contains these files merged into a single file for general use. Please note that users can create custom modules based on their needs from the BAO release files as well.

BAO 2.3.1 is based on the need after the annotation effort performed by Collaborative Drug Discovery (CDD) using their annotation tool BioAssay Express (BAE : http://www.bioassayexpress.com/). CDD annotated 3500 assays using BAE.

Based on the annotations, absent term reports have been generated by BAE. The absence reports were then communicated with the BAO group and processed systematically in a semi-automated way for the ontology additions. The generated OWL vocabulary files with new terms are added to the different vocabulary files based on BAO’s modular architecture. New terms from BAE were added to BAO 2.2.2

### Changes

-07/14/2017:

* Added ‘pKi’ as BAO\_0190004
* Added ‘pKd’ as BAO\_0190005
* Added ‘pKb’ as BAO\_0190006
* Added 'has assay design method' as BAO\_0095009
* Added 'has assay supporting method' as BAO\_0095010

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### Files Merged:

<http://bioassayontology.org/bao/>

* [bao\_complete.owl](http://bioassayontology.org/bao/bao_complete.owl)
* [bao\_complete\_bfo.owl](http://bioassayontology.org/bao/bao_complete_bfo.owl)
* [bao\_core.owl](http://bioassayontology.org/bao/bao_core.owl)
* [bao\_external.owl](http://bioassayontology.org/bao/bao_external.owl)
* [bao\_metadata.owl](http://bioassayontology.org/bao/bao_metadata.owl)
* [bao\_module\_biology.owl](http://bioassayontology.org/bao/bao_module_biology.owl)
* [bao\_module\_properties.owl](http://bioassayontology.org/bao/bao_module_properties.owl)
* [bao\_module\_vocabularies.owl](http://bioassayontology.org/bao/bao_module_vocabularies.owl)
* [bao\_ro\_combinator.owl](http://bioassayontology.org/bao/bao_ro_combinator.owl)
* [bao\_vocabulary\_assay.owl](http://bioassayontology.org/bao/bao_vocabulary_assay.owl)
* [bao\_vocabulary\_assaykit.owl](http://bioassayontology.org/bao/bao_vocabulary_assaykit.owl)
* [bao\_vocabulary\_biology.owl](http://bioassayontology.org/bao/bao_vocabulary_biology.owl)
* [bao\_vocabulary\_computational.owl](http://bioassayontology.org/bao/bao_vocabulary_computational.owl)
* [bao\_vocabulary\_detection.owl](http://bioassayontology.org/bao/bao_vocabulary_detection.owl)
* [bao\_vocabulary\_format.owl](http://bioassayontology.org/bao/bao_vocabulary_format.owl)
* [bao\_vocabulary\_function.owl](http://bioassayontology.org/bao/bao_vocabulary_function.owl)
* [bao\_vocabulary\_instrument.owl](http://bioassayontology.org/bao/bao_vocabulary_instrument.owl)
* [bao\_vocabulary\_materialentity.owl](http://bioassayontology.org/bao/bao_vocabulary_materialentity.owl)
* [bao\_vocabulary\_method.owl](http://bioassayontology.org/bao/bao_vocabulary_method.owl)
* [bao\_vocabulary\_organization.owl](http://bioassayontology.org/bao/bao_vocabulary_organization.owl)
* [bao\_vocabulary\_people.owl](http://bioassayontology.org/bao/bao_vocabulary_people.owl)
* [bao\_vocabulary\_phenotype.owl](http://bioassayontology.org/bao/bao_vocabulary_phenotype.owl)
* [bao\_vocabulary\_properties.owl](http://bioassayontology.org/bao/bao_vocabulary_properties.owl)
* [bao\_vocabulary\_quality.owl](http://bioassayontology.org/bao/bao_vocabulary_quality.owl)
* [bao\_vocabulary\_result.owl](http://bioassayontology.org/bao/bao_vocabulary_result.owl)
* [bao\_vocabulary\_ro.owl](http://bioassayontology.org/bao/bao_vocabulary_ro.owl)
* [bao\_vocabulary\_role.owl](http://bioassayontology.org/bao/bao_vocabulary_role.owl)
* [bao\_vocabulary\_screenedentity.owl](http://bioassayontology.org/bao/bao_vocabulary_screenedentity.owl)
* [bao\_vocabulary\_software.owl](http://bioassayontology.org/bao/bao_vocabulary_software.owl)
* [bao\_vocabulary\_unit.owl](http://bioassayontology.org/bao/bao_vocabulary_unit.owl)

<http://bioassayontology.org/bao/external/>

* [BAO2.0\_CHEBI\_import.owl](http://bioassayontology.org/bao/external/BAO2.0_CHEBI_import.owl)
* [BAO2.0\_EFO\_import.owl](http://www.bioassayontology.org/bao/external/BAO2.0_EFO_import.owl)
* [BAO2.3\_CLO\_import.owl](http://bioassayontology.org/bao/external/BAO2.0_CLO_import.owl)
* [BAO2.3\_DOID\_import.owl](http://bioassayontology.org/bao/external/BAO2.0_DOID_import.owl)
* [BAO2.0\_GO\_import.owl](http://bioassayontology.org/bao/external/BAO2.0_GO_import.owl)
* [BAO2.3\_NCBITaxon\_import.owl](http://bioassayontology.org/bao/external/BAO2.0_NCBITaxon_import.owl)
* [BAO2.0\_PATO\_import.owl](http://bioassayontology.org/bao/external/BAO2.0_PATO_import.owl)
* [BAO2.0\_UBERON\_import.owl](http://bioassayontology.org/bao/external/BAO2.0_UBERON_import.owl)
* [BAO\_DOID\_import.owl](http://bioassayontology.org/bao/external/BAO_DOID_import.owl)
* [IAO\_import.owl](http://bioassayontology.org/bao/external/IAO_import.owl)
* [OBI\_import.owl](http://bioassayontology.org/bao/external/OBI_import.owl)
* [UO\_import.owl](http://bioassayontology.org/bao/external/UO_import.owl)
* [ro.owl](http://bioassayontology.org/bao/external/ro.owl)