

ACToR: Aggregated Computational Toxicology Resource

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The EPA Aggregated Computational Toxicology Resource (ACToR) is a set of databases compiling information on chemicals in the environment from a large number of public and in-house EPA sources. ACToR has 3 main goals: (1) The serve as a repository of public toxicology information on chemicals of interest to the EPA, and in particular to be a central source for the testing data on all chemicals regulated by all EPA programs; (2) To be a source of *in vivo* training data sets for building *in vitro* to *in vivo* computational models; (3) To serve as a central source of chemical structure and identity information for the ToxCastTM and Tox21 programs. There are 4 main databases, all linked through a common set of chemical information and a common structure linking chemicals to assay data: the public ACToR system (available at <http://actor.epa.gov>), the ToxMiner database holding ToxCastTM and Tox21 data, along with results from statistical analyses on these data; the Tox21 chemical repository which is managing the ordering and sample tracking process for the larger Tox21 project; and the public version of ToxRefDB. The public ACToR system contains information on ~500K compounds with toxicology, exposure and chemical property information from >400 public sources. The web site is visited by ~1,000 unique users per month and generates ~1,000 page requests per day on average. The databases are built on open source technology, which has allowed us to export them to a number of collaborating organizations.

This work was reviewed by EPA and approved for publication but does not necessarily reflect official Agency policy.