JRC Dataset

EURL ECVAM Genotoxicity and Carcinogenicity Consolidated Database of Ames Positive Chemicals

Description:
The EURL ECVAM Genotoxicity and Carcinogenicity Consolidated Database is a structured master database that compiles available genotoxicity and carcinogenicity data for Ames positive chemicals originating from different sources. By using a harmonised format to capture the information, this database represents a powerful resource for data analysis that can be used to guide a thorough evaluation of genotoxicity and carcinogenicity. The database is intended as a resource for evaluating the predictivity of the Ames test for in vivo genotoxicity and carcinogenicity when considered alone or in association with in vitro mammalian cell assays (gene mutation and clastogenicity/aneugenicity) and for better characterisation of those cases where the Ames test leads to irrelevant (‘false positive’) results. The database may also serve as a platform for detailed structural characterisation of specific groups of compounds with or without carcinogenic or genotoxic activity. Available here is also the Carcinogenicity Genotoxicity eXperience (CGX) dataset, previously hosted in the Lhasa Limited Site.

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How to cite:

Keywords:
ames test, carcinogenicity, database, genotoxicity

Related resources:

Data access

EURL ECVAM Genotoxicity and Carcinogenicity Consolidated Database of Ames Positive Chemicals

The EURL ECVAM Genotoxicity and Carcinogenicity Consolidated database is built on curated genotoxicity and carcinogenicity data for 726 Ames positive chemicals compiled from a variety of sources and is intended to aid in the development and evaluation of alternative approaches to animal testing. The database is also linked to two other JRC databases, CheLIST and ChemAgora, which provide supplementary information on the Ames positive chemicals.


Publications

Can in vitro mammalian cell genotoxicity test results be used to complement positive results in the Ames test and help predict carcinogenic or in vivo genotoxic activity? II. Construction and analysis of a consolidated database
Kirkland D, Zeiger E, Madia F, Corvi R. Can in vitro mammalian cell genotoxicity test results be used to complement positive results in the Ames test and help predict carcinogenic or in vivo genotoxic activity? II. Construction and analysis of a consolidated database. MUTATION RESEARCH-GENETIC TOXICOLOGY AND ENVIRONMENTAL MUTAGENESIS 775-776; 2014. p. 69-80. JRC91332
DOI:10.1016/j.mrgentox.2014.10.006

Can in vitro mammalian cell genotoxicity test results be used to complement positive results in the Ames test and help predict carcinogenic or in vivo genotoxic activity?: I. Reports of individual databases presented at an EURL ECVAM Workshop
Other resources

Carcinogenicity Genotoxicity eXperience (CGX) dataset

The CGX dataset is a collection of publicly available data that can be used for a variety of scientific purposes including structural-based evaluation of chemical genotoxicity and the development of alternative approaches to animal testing such as Structure-Activity Relationships (SAR). More information can be found in Kirkland et al., 2005 (https://doi.org/10.1016/j.mrgentox.2005.02.004).


Instructions on how to use the EURL ECVAM Genotoxicity and Carcinogenicity Consolidates Database of Ames Positive Chemicals

PDF document with instructions on how to use and interpret the data.


Additional information:

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