

ISSMIC database on *in vivo* mutagenicity (micronucleus test)

Definition of the fields in files *ISSMIC_vvv_nnn_ddddddd.xls* and *ISSMIC_vvv_nnn_ddddddd.sdf*

MN_ID: Identification Code of the chemical;

Name: Chemical Name;

CAS: Registry Number of the Chemical Abstract Service;

Formula: Chemical Formula;

FW: Molecular Weight;

SMILES: simplified chemical notation that represents a chemical structure as a linear textual string. It is aimed at computer applications (for more information, see http://www.daylight.com/smiles/f_smiles.html) ;

Reference: Sources of *in vivo* Micronucleus test data: **Toxnet** (<http://toxnet.nlm.nih.gov/index.html>); **NTP** (National Toxicology Program, <http://ntp.niehs.nih.gov/>); **Leadscope FDA CRADA Toxicity Database** (<http://www.leadscope.com/>);

Overall: overall *in vivo* micronucleus test outcome: 1= negative; 2= equivocal; 3= positive; Inc= inconclusive; ND= no data.
Code 3 is given to chemicals positive in at least one experimental group; Code 2 is given to chemicals with equivocal results in at least one experimental group, together with negative results in the other experimental groups; Code 1 is given when there is no induction of micronuclei and the Toxicity Biomarker (TB) points to target cell toxicity. An experiment is defined as inconclusive (Inc) when: a) both the outcome and TB are negative; or b) the outcome is negative and no TB data are available in the literature. The genetically modified models do not contribute to the overall outcome;

Bone Marrow Mouse Male; Bone Marrow Mouse Female; Bone Marrow Rat Male; Bone Marrow Rat Female; Peripheral Blood Mouse Male; Peripheral Blood Mouse Female; Peripheral Blood Rat Male; Peripheral Blood Rat Female; Splenocytes Mouse Male; Splenocytes Mouse Female; Splenocytes Rat Male; Splenocytes Rat Female: *in vivo* Micronucleus test outcomes in Bone Marrow cells, Peripheral blood cells, and Splenocytes in four experimental groups (Mouse, Rat, Male, Female). Outcome: 1= negative; 2= equivocal; 3= positive; Inc= inconclusive; ND= no data.
An experiment is inconclusive, if: a) both the outcome and TB are negative; or b) the outcome is negative and no TB data are available in the literature.

Bone Marrow GenMod MouseM; Bone Marrow GenMod MouseF; Peripheral Blood GenMod MouseM; Peripheral Blood GenMod MouseF: *in vivo* Micronucleus test outcomes in genetically Modified Mice (Male and Female) in Bone Marrow and Peripheral blood cells.
Outcome: 1= negative; 2= equivocal; 3= positive; Inc= inconclusive; ND= no data.
An experiment is inconclusive, if: a) both the outcome and TB are negative; or b) the outcome is negative and no TB data are available in the literature.

Details: Strain, Route of administration, Toxicity Biomarker (TB).
Route of administration: Oral= Dosed Feed or Dosed Water; Inh = Inhalation; Gavage; Dermal; IP = Intraperitoneal; Sbc = Subcutaneous; IV = Intravenous.

TB: Pos = positive, Pos1D = positive at one dose, PosHD = positive at highest dose: in all these cases the substance induced toxicity in the target cells;
TB: Neg = negative: the substance did not induced toxicity in the target cells;
TB: ND = No Data available;

Contradictory outcomes: tracks contradictory results in the same experimental group, when more experiments were performed.

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