

Subject index

- Adaptive response**
(X-ray induced), prevention, human lymphocytes 593
to ionizing radiation, analysis of DNA damage recovery processes 291
- Aflatoxin B**
mutagenic activity, effect of phorone, transgenic mice 69
- Alachlor**
genotoxicity, cultured human lymphocytes 221
- Aneuploidy**
during mouse meioses I and II, dose–response and threshold estimation 195
X-ray induction, primary human cells 307
- Anti-CD38**
adaptive response prevention, human lymphocytes 593
- Aromatic amines**
role in breast cancer 3
- Arsenite**
cytotoxicity and micronuclei induction, effect of calcium 75
- Ascorbic acid**
protective effects towards doxorubicin micronuclei induction 161
- Azoxymethane**
mutagenicity and toxicity 241
- Benzene**
micronuclei induction, erythrocytes 455
- Benzo[a]pyrene**
DNA adduct induction, identification and repair, *Xenopus laevis* larvae 101
mutagenicity and DNA adduct formation, suppressive effect of methyl methacrylate 177
- 1,3-Butadiene**
micronuclei induction by metabolites, rat spermatids 525
occupational exposure, assessment 9
occupational exposure, haemoglobin adducts as biomarkers 145
- Caffeine**
increased radiation risk, analysis, mammalian cells 57
cytogenetic effects during *in vivo* mouse oocyte maturation 395
- Calcium**
effect on arsenite induced cytotoxicity and micronuclei formation 75
- Cancer**
breast cancer, role of aromatic amines 3
- Catechin**
in soluble instant teas 189
- Cell proliferation**
hepatocyte cultures, effect of age and caloric restriction 281
- Centromere**
detection, FISH 285
target for mitomycin C induced chromosome damage, mouse splenocytes 133
- Chlorinated hydrocarbons**
activation and deactivation to genotoxins 247
- 1-Chloromethylpyrene**
gene mutation induction, Muta™Mouse 529
- Chlorophyllin**
protective effects towards doxorubicin micronuclei induction 161
- Chromosome aberrations**
etoposide induction during mouse oocyte maturation 357
restriction endonuclease induction, barley 119
- Chromosome segregation**
in cytokinesis blocked human lymphocytes 335
- Cleistanthin B**
cytotoxicity and genotoxicity in normal and tumor cells 553
- CO-FISH**
inversion detection 139
- Colchicine**
effect on chromosome segregation, human lymphocytes 335
- Comet assay**
analysis of caffeine mediated increased radiation risk, mammalian cells 57
analysis of DNA damage and repair 169
cytogenicity of PCB77 on brown trout 485
- Daunomycin**
chromosome aberration induction, detection 537
- dCTP**
misincorporation in CHO mutator phenotype 401
- Diallyl disulphide**
inhibition of carcinogens, boiled pork juice 235
- Diepoxybutane**
sister chromatid exchange induction, cultured human lymphocytes, influence of glutathione *S*-transferase T1 213
- 1,2-Dimethylhydrazine**
mutagenicity and toxicity 241
- Doxorubicin**
micronuclei induction, protective effects of α -hederrin, chlorophyllin and ascorbic acid 161
- Drosophila melanogaster**
ring spot test, genotoxicity testing of topoisomerase inhibitors 315
white-ivory locus, molecular study of germinal reversions 559
- Environmental carcinogenic chemicals**
biomonitoring human exposure 363
- Escherichia coli**
mutagenicity and toxicity of azoxymethane 241
mutagenicity and toxicity of 1,2-dimethylhydrazine 241
MX100 tester strain, use in genotoxicity studies 327
Tryp⁻ test, mutagenic evaluation of luxabendazole 27
- Etoposide**
action in *in vivo* meiosis, male mouse 435
chromosome aberration induction during mouse oocyte maturation 357
- Fat**
mutagenicity of high fat diets, transgenic mice 43
- Flavonols**
effect on antimutagenicity of tea 597
- Flow cytometry and sorting**
analysis of micronuclei DNA content distribution 405
- Fluoranthene**
assessment of potential *in vivo* genotoxicity 493
- Fluorescent *in situ* hybridization (FISH)**
analysis of micronuclei DNA content distribution 405
centromere detection, application to human lymphocyte micronucleus assay 285
comparison with metaphase analysis of Giemsa-stained chromosomes in chromosome aberration detection 537
detection of aneugenic and clastogenic potential of directly and indirectly acting chemicals, human hepatoma and peripheral blood lymphocytes 425
detection of aneugenic and clastogenic potential of X-rays, human hepatoma and peripheral blood lymphocytes 425
- Fluoroquinolones**
photomutagenicity testing 497
- 2-D Geometric descriptor**
association with estrogens and antiestrogens 95
- Germinal reversions**
molecular study of *white-ivory* locus, *Drosophila melanogaster* 559
- Glutathione *S*-transferase T1**
influence on sister chromatid exchange, cultured human lymphocytes 213
- Griseofulvin**
aneuploidy induction during mouse meioses I and II 195
- Haemoglobin adducts**
biomarkers of 1,3-butadiene exposure 145
- α -Hederin**
protective effects towards doxorubicin micronuclei induction 161
- Hepatocyte cultures**
effect of age and caloric restriction on cell proliferation 281
- α -Hexachlorocyclohexane**
genotoxic effects, rodent and human hepatocytes 79
- Host cell reactivation**
of irradiated adenovirus in CHO cells 89
- hprt* Gene**
methylene chloride mutation induction, DNA sequence analysis 229
sequence analysis of deletion mutations, human lymphocytes 511
spontaneous mutation spectrum, V-H4 (Chinese hamster V79 cell mutant) 155
styrene oxide mutation induction, analysis 581

- Humic acid**
in vivo cytogenetic effects 467
- Human lymphocytes**
 adaptive response prevention, anti-CD38 593
 cytokinesis blocked, chromosome segregation analysis 335
hprt locus, sequence analysis of deletion mutations 511
 mutagenicity of polychlorinated biphenyls 383
 styrene oxide *hprt* mutation induction, analysis 581
- Hydroxychavicol**
 genotoxic induction, role of oxidative DNA damage 519
- Hyperbaric oxygen (HBO) therapy**
 DNA damage induction 605
- In vitro* clastogens**
 detection, effect of harvest times 61
 detection, mouse lymphoma assay 349
- Inverted DNA sequences**
 detection by CO-FISH 139
- Luxabendazole**
 mutagenic evaluation 27
- Maleic hydrazide**
 genotoxicity, cultured human lymphocytes 221
- Methyl methacrylate**
 suppressive effect on mutagenicity and DNA adduct formation of 1-nitropyrene and benzo[a]pyrene 177
- Methyl methanesulphonate**
 as a control agent, male mouse and male rat dominant lethal assays 611
- Methylene chloride**
hprt gene mutation induction, DNA sequence analysis 229
- Micronuclei**
 (radiation induced), chromosome content and ultrastructure 419
 benzene induced, erythrocytes 455
 DNA content distribution, analysis 405
in vitro induction by 1,3-butadiene metabolites, rat spermatids 525
- Micronucleus assay**
 cytogenicity of PCB77 on brown trout 485
 detection of aneugenic and clastogenic potential of directly and indirectly acting chemicals, human hepatoma and peripheral blood lymphocytes 425
 detection of aneugenic and clastogenic potential of X-rays, human hepatoma and peripheral blood lymphocytes 425
- MINISCREEN assay**
 letter to the Editor 415
 use in bacterial mutagenicity testing 201
- Mitomycin C**
 micronuclei induction, mouse splenocytes 133
- Mitotic non-disjunction**
 mechanism for X-ray induced aneuploidy, primary human cells 307
- Mouse lymphoma assay**
 detection of *in vitro* clastogens and spindle poisons 349
- Mouse oocyte maturation**
 cytogenetic effects of caffeine 395
 etoposide induced chromosome aberrations 357
- N*-Methyl-*N'*-nitro-*N*-nitrosoguanidine**
 gene mutation induction, MutaTMMouse 529
- Nicotine**
 excretion in urine 207
- 1-Nitropyrene**
 mutagenicity and DNA adduct formation, suppressive effect of methyl methacrylate 177
- Oxidative DNA damage**
 role in hydroxychavicol induced genotoxicity 519
- PhIP**
 organ distinctive mutagenicity, MutaTMMouse 505
- Phorone**
 effect on mutagenic activity of aflatoxin B₁, transgenic mice 69
- Polychlorinated biphenyls**
 cytogenetic studies on brown trout 485
 mutagenicity, *in vitro* human lymphocytes 383
- PRINS**
 tandem labelling approach, detection of minor and major satellite DNA, cytokinesis blocked mouse splenocytes 547
- Pyrimethamine**
 micronucleus induction, analysis 85
- Radiation**
 adaptive response, DNA damage recovery processes, analysis 291
 aneuploidy induction, primary human cells 307
 congenital abnormalities and germinal mutations near a nuclear power plant 299
 low dose mutation induction, human cell mutants 275
 micronuclei induction 419
 prevention of X-ray induced adaptive response 593
 X-ray induced translocations, non-random chromosomal involvement, mouse spermatogonial stem cells 391
 X-rays, detection of aneugenic and clastogenic potential 425
- Restriction endonuclease recognition sites**
 effect of UV light 463
- Restriction endonucleases**
 chromosomal aberration induction, barley 119
- Salmonella typhimurium***
hisG428, molecular analysis of ochre revertants 341
 His⁻ test, mutagenic evaluation of luxabendazole 27
 molecular analysis of *Salmonella hisG428* ochre revertants 341
 mutagenicity and toxicity of azoxymethane 241
 mutagenicity and toxicity of 1,2-dimethylhydrazine 241
 prediction of mutagenicity 471
 TM677, guanine phosphoribosyltransferase (*gpt*) gene mutation induction by steviol, DNA sequence analysis 565
- Sister chromatid exchange**
 damage induction 183
 diepoxybutane induction, influence of glutathione *S*-transferase T1, cultured human lymphocytes 213
- Smoking**
 excretion of mutagens in urine 207
- Sperm toxicity**
 pesticide induction, effect of vitamin C 33
- Spindle poisons**
 detection, mouse lymphoma assay 349
- Spontaneous deletions**
 at shuttle vector locus, transgenic mice 49
- Steviol**
 evaluation of genotoxicity 573
 metabolically activated, regionally-targeted mutagenesis 565
 mutation induction of guanine phosphoribosyltransferase (*gpt*) gene of *Salmonella typhimurium* TM677, DNA sequence analysis 565
- Stevioside**
 evaluation of genotoxicity 573
- Styrene oxide**
hprt mutation induction, analysis 581
- Tea**
 (soluble instant teas), antimutagenicity and catechin content 189
 antimutagenic activity, relationship with components 37
 antimutagenicity, effect of flavonols 597
 antimutagenicity of green, black and decaffeinated teas 597
- Tobacco**
 Indian tobacco products, mutagenic potential 151
- Topoisomerase inhibitors**
 genotoxicity testing, *Drosophila melanogaster* ring spot test 315
- Transgenic mouse model**
 aflatoxin B₁ induced *lacI* mutation, effect of phorone 69
 gene mutation detection following treatment with *N*-methyl-*N'*-nitro-*N*-nitrosoguanidine or 1-chloromethylpyrene 529
 mutagenicity of high fat diets 43
 organ distinctive mutagenicity of PhIP 505
 plasmid-based model, evaluation for *in vivo* mutation induction 111
 spontaneous deletions at shuttle vector locus 49
- Trophosphamide**
 genotoxicity, mouse germ cells 125
- Unscheduled DNA synthesis assay**
 development of *in vivo/in vitro* two-dose/single-sample rat hepatocyte assay 19
- UV light**
 effect on restriction endonuclease recognition sites 463

Subject index

V-H4

(Chinese hamster V79 cell mutant), spontaneous mutation spectrum, *hprt* gene 155

Vinclozolin

toxicity 445

Vinblastine

effect on chromosome segregation, human lymphocytes 335

Vitamin C

effect on sperm toxicity 33

White-ivory locus

molecular study of germinal reversions, *Drosophila melanogaster* 559

Xenopus laevis larvae

DNA adduct induction, benzo[*a*]pyrene 101