

APPENDIX 1

TEST SYSTEM CODE WORDS

Appendix 1. Test system code words

End-point ^a	Code	Definition
NON-MAMMALIAN SYSTEMS		
<i>Prokaryotic systems</i>		
D	PRB	Prophage, induction, SOS repair test, DNA strand breaks, cross-links or related damage
D	ECB	<i>Escherichia coli</i> (or <i>E. coli</i> DNA), DNA strand breaks, cross-links or related damage; DNA repair
D	SAD	<i>Salmonella typhimurium</i> , DNA repair-deficient strains, differential toxicity
D	ECD	<i>Escherichia coli pol A/W3110-P3478</i> , differential toxicity (spot test)
D	ECL	<i>Escherichia coli pol A/W3110-P3478</i> , differential toxicity (liquid suspension test)
D	ERD	<i>Escherichia coli rec</i> strains, differential toxicity
D	BSD	<i>Bacillus subtilis rec</i> strains, differential toxicity
D	BRD	Other DNA repair-deficient bacteria, differential toxicity
G	BPF	Bacteriophage, forward mutation
G	BPR	Bacteriophage, reverse mutation
G	SAF	<i>Salmonella typhimurium</i> , forward mutation
G	SA0	<i>Salmonella typhimurium</i> TA100, reverse mutation
G	SA2	<i>Salmonella typhimurium</i> TA102, reverse mutation
G	SA3	<i>Salmonella typhimurium</i> TA1530, reverse mutation
G	SA4	<i>Salmonella typhimurium</i> TA104, reverse mutation
G	SA5	<i>Salmonella typhimurium</i> TA1535, reverse mutation
G	SA7	<i>Salmonella typhimurium</i> TA1537, reverse mutation
G	SA8	<i>Salmonella typhimurium</i> TA1538, reverse mutation
G	SA9	<i>Salmonella typhimurium</i> TA98, reverse mutation
G	SAS	<i>Salmonella typhimurium</i> (other miscellaneous strains), reverse mutation
G	ECF	<i>Escherichia coli</i> exclusive of strain K12, forward mutation
G	ECK	<i>Escherichia coli</i> K12, forward or reverse mutation
G	ECW	<i>Escherichia coli</i> WP2 <i>uvrA</i> , reverse mutation
G	EC2	<i>Escherichia coli</i> WP2, reverse mutation
G	ECR	<i>Escherichia coli</i> (other miscellaneous strains), reverse mutation
G	BSM	<i>Bacillus subtilis</i> , multigene test
G	KPF	<i>Klebsiella pneumoniae</i> , forward mutation
G	MAF	<i>Micrococcus aureus</i> , forward mutation

^a Endpoints are grouped within each phylogenetic category as follows: A, aneuploidy; C, chromosomal aberrations; D, DNA damage, F, assays of body fluids; G, gene mutation; H, host-mediated assays; I, inhibition of intercellular communication; M, micronuclei; P, sperm morphology; R, mitotic recombination or gene conversion; S, sister chromatid exchange; T, cell transformation

Appendix 1 (contd)

End-point	Code	Definition
NON-MAMMALIAN SYSTEMS (contd)		
<i>Lower eukaryotic systems</i>		
D	SSB	<i>Saccharomyces</i> species, DNA strand breaks, cross-links or related damage
D	SSD	<i>Saccharomyces</i> species, DNA repair-deficient strains, differential toxicity
D	SZD	<i>Schizosaccharomyces pombe</i> , DNA repair-deficient strains, differential toxicity
R	SCG	<i>Saccharomyces cerevisiae</i> , gene conversion
R	SCH	<i>Saccharomyces cerevisiae</i> , homozygosis by mitotic recombination or gene conversion
R	SZG	<i>Schizosaccharomyces pombe</i> , gene conversion
R	ANG	<i>Aspergillus nidulans</i> , genetic crossing-over
G	SCF	<i>Saccharomyces cerevisiae</i> , forward mutation
G	SCR	<i>Saccharomyces cerevisiae</i> , reverse mutation
G	SGR	<i>Streptomyces griseoflavus</i> , reverse mutation
G	STF	<i>Streptomyces coelicolor</i> , forward mutation
G	STR	<i>Streptomyces coelicolor</i> , reverse mutation
G	SZF	<i>Schizosaccharomyces pombe</i> , forward mutation
G	SZR	<i>Schizosaccharomyces pombe</i> , reverse mutation
G	ANF	<i>Aspergillus nidulans</i> , forward mutation
G	ANR	<i>Aspergillus nidulans</i> , reverse mutation
G	NCF	<i>Neurospora crassa</i> , forward mutation
G	NCR	<i>Neurospora crassa</i> , reverse mutation
G	PSM	<i>Paramecium</i> species, mutation
C	PSC	<i>Paramecium</i> species, chromosomal aberrations
A	SCN	<i>Saccharomyces cerevisiae</i> , aneuploidy
A	ANN	<i>Aspergillus nidulans</i> , aneuploidy
A	NCN	<i>Neurospora crassa</i> , aneuploidy
<i>Plant systems</i>		
D	PLU	Plants, unscheduled DNA synthesis
G	ASM	<i>Arabidopsis</i> species, mutation
G	HSM	<i>Hordeum</i> species, mutation
G	TSM	<i>Tradescantia</i> species, mutation
G	PLM	Plants (other), mutation
S	VFS	<i>Vicia faba</i> , sister chromatid exchange
S	PLS	Plants (other), sister chromatid exchange
M	TSI	<i>Tradescantia</i> species, micronuclei
M	PLI	Plants (other), micronuclei
C	ACC	<i>Allium cepa</i> , chromosomal aberrations
C	HSC	<i>Hordeum</i> species, chromosomal aberrations
C	TSC	<i>Tradescantia</i> species, chromosomal aberrations
C	VFC	<i>Vicia faba</i> , chromosomal aberrations
C	PLC	Plants (other), chromosomal aberrations

Appendix 1 (contd)

End-point ^a	Code	Definition
NON-MAMMALIAN SYSTEMS (contd)		
<i>Insect systems</i>		
R	DMG	<i>Drosophila melanogaster</i> , genetic crossing-over or recombination
G	DMM	<i>Drosophila melanogaster</i> , somatic mutation (and recombination)
G	DMX	<i>Drosophila melanogaster</i> , sex-linked recessive lethal mutations
C	DMC	<i>Drosophila melanogaster</i> , chromosomal aberrations
C	DMH	<i>Drosophila melanogaster</i> , heritable translocation test
C	DML	<i>Drosophila melanogaster</i> , dominant lethal test
A	DMN	<i>Drosophila melanogaster</i> , aneuploidy
MAMMALIAN SYSTEMS		
<i>Animal cells in vitro</i>		
D	DIA	DNA strand breaks, cross-links or related damage, animal cells <i>in vitro</i>
D	RIA	DNA repair exclusive of unscheduled DNA synthesis, animal cells <i>in vitro</i>
D	URP	Unscheduled DNA synthesis, rat primary hepatocytes
D	UIA	Unscheduled DNA synthesis, other animal cells <i>in vitro</i>
G	GCL	Gene mutation, Chinese hamster lung cells exclusive of V79 <i>in vitro</i>
G	GCO	Gene mutation, Chinese hamster ovary cells <i>in vitro</i>
G	G9H	Gene mutation, Chinese hamster lung V79 cells, <i>hprt</i> locus
G	G90	Gene mutation, Chinese hamster lung V79 cells, ouabain resistance
G	GML	Gene mutation, mouse lymphoma cells exclusive of L5178Y <i>in vitro</i>
G	G5T	Gene mutation, mouse lymphoma L5178Y cells, TK locus
G	G51	Gene mutation, mouse lymphoma L5178Y cells, all other loci
G	GIA	Gene mutation, other animal cells <i>in vitro</i>
S	SIC	Sister chromatid exchange, Chinese hamster cells <i>in vitro</i>
S	SIM	Sister chromatid exchange, mouse cells <i>in vitro</i>
S	SIR	Sister chromatid exchange, rat cells <i>in vitro</i>
S	SIS	Sister chromatid exchange, Syrian hamster cells <i>in vitro</i>
S	SIT	Sister chromatid exchange, transformed animal cells <i>in vitro</i>
S	SIA	Sister chromatid exchange, other animal cells <i>in vitro</i>
M	MIA	Micronucleus test, animal cells <i>in vitro</i>
C	CIC	Chromosomal aberrations, Chinese hamster cells <i>in vitro</i>
C	CIM	Chromosomal aberrations, mouse cells <i>in vitro</i>
C	CIR	Chromosomal aberrations, rat cells <i>in vitro</i>
C	CIS	Chromosomal aberrations, Syrian hamster cells <i>in vitro</i>
C	CIT	Chromosomal aberrations, transformed animal cells <i>in vitro</i>
C	CIA	Chromosomal aberrations, other animal cells <i>in vitro</i>
A	AIA	Aneuploidy, animal cells <i>in vitro</i>
T	TBM	Cell transformation, BALB/c 3T3 mouse cells
T	TCM	Cell transformation, C3H 10T1/2 mouse cells
T	TCS	Cell transformation, Syrian hamster embryo cells, clonal assay
T	TFS	Cell transformation, Syrian hamster embryo cells, focus assay

Appendix 1 (contd)

End-point ^a	Code	Definition
MAMMALIAN SYSTEMS (contd)		
<i>Animal cells in vitro (contd)</i>		
T	TPM	Cell transformation, mouse prostate cells
T	TCL	Cell transformation, other established cell lines
T	TRR	Cell transformation, RLV/Fischer rat embryo cells
T	T7R	Cell transformation, SA7/rat cells
T	T7S	Cell transformation, SA7/Syrian hamster embryo cells
T	TEV	Cell transformation, other viral enhancement systems
T	TVI	Cell transformation, treated <i>in vivo</i> , scored <i>in vitro</i>
<i>Human cells in vitro</i>		
D	DIH	DNA strand breaks, cross-links or related damage, human cells <i>in vitro</i>
D	RIH	DNA repair exclusive of unscheduled DNA synthesis, human cells <i>in vitro</i>
D	UHF	Unscheduled DNA synthesis, human fibroblasts <i>in vitro</i>
D	UHL	Unscheduled DNA synthesis, human lymphocytes <i>in vitro</i>
D	UHT	Unscheduled DNA synthesis, transformed human cells <i>in vitro</i>
D	UIH	Unscheduled DNA synthesis, other human cells <i>in vitro</i>
G	GIH	Gene mutation, human cells <i>in vitro</i>
S	SHF	Sister chromatid exchange, human fibroblasts <i>in vitro</i>
S	SHL	Sister chromatid exchange, human lymphocytes <i>in vitro</i>
S	SHT	Sister chromatid exchange, transformed human cells <i>in vitro</i>
S	SIH	Sister chromatid exchange, other human cells <i>in vitro</i>
M	MIH	Micronucleus test, human cells <i>in vitro</i>
C	CHF	Chromosomal aberrations, human fibroblasts <i>in vitro</i>
C	CHL	Chromosomal aberrations, human lymphocytes <i>in vitro</i>
C	CHT	Chromosomal aberrations, transformed human cells <i>in vitro</i>
C	CIH	Chromosomal aberrations, other human cells <i>in vitro</i>
A	AIH	Aneuploidy, human cells <i>in vitro</i>
T	TIH	Cell transformation, human cells <i>in vitro</i>
<i>Body fluid and host-mediated assays</i>		
F	BFA	Body fluids from animals, microbial mutagenicity
F	BFH	Body fluids from humans, microbial mutagenicity
H	HMA	Host-mediated assay, animal cells in animal hosts
H	HMH	Host-mediated assay, human cells in animal hosts
H	HMM	Host-mediated assay, microbial cells in animal hosts
<i>Animals in vivo</i>		
D	DVA	DNA strand breaks, cross-links or related damage, animal cells <i>in vivo</i>
D	RVA	DNA repair exclusive of unscheduled DNA synthesis, animal cells <i>in vivo</i>
D	UPR	Unscheduled DNA synthesis, rat hepatocytes <i>in vivo</i>
D	UVC	Unscheduled DNA synthesis, hamster cells <i>in vivo</i>
D	UVM	Unscheduled DNA synthesis, mouse cells <i>in vivo</i>

Appendix 1 (contd)

End-point ^a	Code	Definition
MAMMALIAN SYSTEMS (contd)		
<i>Animals in vivo (contd)</i>		
D	UVR	Unscheduled DNA synthesis, other rat cells <i>in vivo</i>
D	UVA	Unscheduled DNA synthesis, other animal cells <i>in vivo</i>
G	GVA	Gene mutation, animal cells <i>in vivo</i>
G	MST	Mouse spot test
G	SLP	Mouse specific locus test, postspermatogonia
G	SLO	Mouse specific locus test, other stages
S	SVA	Sister chromatid exchange, animal cells <i>in vivo</i>
M	MVM	Micronucleus test, mice <i>in vivo</i>
M	MVR	Micronucleus test, rats <i>in vivo</i>
M	MVC	Micronucleus test, hamsters <i>in vivo</i>
M	MVA	Micronucleus test, other animals <i>in vivo</i>
C	CBA	Chromosomal aberrations, animal bone-marrow cells <i>in vivo</i>
C	CLA	Chromosomal aberrations, animal leucocytes <i>in vivo</i>
C	CCC	Chromosomal aberrations, spermatocytes treated <i>in vivo</i> , spermatocytes observed
C	CGC	Chromosomal aberrations, spermatogonia treated <i>in vivo</i> , spermatocytes observed
C	CGG	Chromosomal aberrations, spermatogonia treated <i>in vivo</i> , spermatogonia observed
C	COE	Chromosomal aberrations, oocytes or embryos treated <i>in vivo</i>
C	CVA	Chromosomal aberrations, other animal cells <i>in vivo</i>
C	DLM	Dominant lethal test, mice
C	DLR	Dominant lethal test, rats
C	MHT	Mouse heritable translocation test
A	AVA	Aneuploidy, animal cells <i>in vivo</i>
T	TVI	Cell transformation, treated <i>in vivo</i> , scored <i>in vitro</i>
<i>Humans in vivo</i>		
D	DVH	DNA strand breaks, cross-links or related damage, human cells <i>in vivo</i>
D	UBH	Unscheduled DNA synthesis, human bone-marrow cells <i>in vivo</i>
D	UVH	Unscheduled DNA synthesis, other human cells <i>in vivo</i>
S	SLH	Sister chromatid exchange, human lymphocytes <i>in vivo</i>
S	SVH	Sister chromatid exchange, other human cells <i>in vivo</i>
M	MVH	Micronucleus test, human cells <i>in vivo</i>
C	CBH	Chromosomal aberrations, human bone-marrow cells <i>in vivo</i>
C	CLH	Chromosomal aberrations, human lymphocytes <i>in vivo</i>
C	CVH	Chromosomal aberrations, other human cells <i>in vivo</i>
A	AVH	Aneuploidy, human cells <i>in vivo</i>
<i>Test systems not shown on activity profiles</i>		
D	BID	Binding (covalent) to DNA <i>in vitro</i>
D	BIP	Binding (covalent) to RNA or protein <i>in vitro</i>

Appendix 1 (contd)

End-point"	Code	Definition
<i>Test systems not shown on activity profiles (contd)</i>		
D	BVD	Binding (covalent) to DNA, animal cells <i>in vivo</i>
D	BVP	Binding (covalent) to RNA or protein, animal cells <i>in vivo</i>
D	BHD	Binding (covalent) to DNA, human cells <i>in vivo</i>
D	BHP	Binding (covalent) to RNA or protein, human cells <i>in vivo</i>
I	ICR	Inhibition of intercellular communication, animal cells <i>in vitro</i>
I	ICH	Inhibition of intercellular communication, human cells <i>in vitro</i>
P	SPF	Sperm morphology, F1 mice <i>in vivo</i>
P	SPM	Sperm morphology, mice <i>in vivo</i>
P	SPR	Sperm morphology, rats <i>in vivo</i>
P	SPH	Sperm morphology, humans <i>in vivo</i>
