

Supplementary Table 1 Chromosome aberrations detected with FISH in mammary epithelial cultures

ID	No. of cells scored	No. of aberrations detected ^{b)}						Clone and other note	Total no. of events	Frequency (%)
		t	ins	cx	dic	ace	t-equivalent ^{c)}			
6 wks after irradiation										
^{a)} F1	800	31	1				33	t(2q-;1q+) × 2	32	4.01
F2	412	10		1		1	11		11	2.67
F3	800	34		2		1	36	t(2q-;14q+) × 4	33	4.14
F6	800	35				3	35	t(2q-;4q+) × 7	29	3.65
F7	800	31		7			38	cx-t(5q;4q)(4q;?) × 3 t(2q-;1q+) × 2 t(2q-;3q+) × 2	32	4.02
F8	800	24	1				26		26	3.25
F11	800	23	1			2	25		25	3.13
F12	800	44				1	44		44	5.50
F13	800	31	1				33	t(4q+;10q-),t(3q+;11q-?) × 4	30	3.76
F14	800	26					26		26	3.25
Subtotal	7612								288	3.74
^{a)} M4										
	800	15	1		4*	2	17	*3 cells had dic + ace 1 cell had dic only	17	2.13
M9	800	24	1	2		2	28		28	3.50
^{a)} V5	800	14			3*	1	14	*2 cells had dic + ace 1 cell had dic only	14	1.75
Subtotal	2400								59	2.46
9 wks after irradiation										
F16	722	21					21	t(2q±;4q±) × 2 t(2q-;3q+) × 2 t(4q-;4q+)** × 2	19	2.64
F17	800	23	1				25	t(2q-;3q+) × 3	23	2.88
F20	171	6		3			9	t(2q-;3p+;9q-) × 3	7	4.14
F21	234	14					14		14	5.98
F27	800	24	1			1	26	t(4q-;4q+) × 8	26	3.28
Subtotal	2727								89	3.79

M18	800	27	1		2*	6	29	t(2q+;4q-) × 3 t(4q±;3q±) × 2 *2 cells had dic +ace	26	3.26
M23	523	14				2	14		14	2.68
Subtotal	1323								40	2.97
45 wks after irradiation										
F58	800	25		3		1	28		28	3.50
F59	800	29				2	29		29	3.63
F60	800	28				1	28	t(4q+;7q-) × 5	24	3.02
F66	800	42				1	42	t(2q-;4q+) × 2	41	5.13
F67	800	22	1	2		2	26	t(2q+;4q-) × 2	25	3.13
F68	800	13				1	13		13	1.63
F69	800	29	1	2		4	33		33	4.13
F70	800	21		1		1	22	This rat experienced pregnancy, delivery, and lactation.	22	2.75
Subtotal	6400								215	3.36
M56	800	23		1		11	24		24	3.00
V57	800	26		4		4	30		30	3.75
Subtotal	1600								54	3.38
Control										
54 (12 wks) ^{d)}	800	0					0		0	0
55 (12 wks)	762	1					1		1	0.13
63 (45 wks)	800	4					4		4	0.50
61 (57 wks)	800	1				2	1		1	0.13
62 (57 wks)	702	4					4		4	0.57
Subtotal	3864								10	0.27

^{a)} F stands for rats irradiated as fetuses (at day 17.5 pc), M for irradiated mothers (at 12 weeks old), and V for those irradiated as virgins (at 12 weeks old)

^{b)} t = translocation, ins = insersion, cx = complex-type aberration, dic = dicentric, ace = acentric fragment.

^{c)} Insertions (ins) were counted as two translocations and complex-type aberrations (cx) were classified according to the number of color junctions (Tucker JD et al, 1995, Cytogenet. Cell Genet., 68,211-221)

^{d)} Age in weeks at the time of FISH examination.

Supplementary Table 2 Chromosome aberrations detected with FISH in spleen cell cultures

ID ^a	No. of cells scored	No. of aberrations detected ^b							Total no. of events	Frequency (%)
		t	ins	cx	dic	ace	t-equivalent ^c	Clone		
9 wks after irradiation										
F16	800	3					3		3	0.38
F17	800	3					3		3	0.38
F20	800	2				1	2		2	0.25
F21	800	0					0		0	0
F27	800	1					1		1	0.13
Subtotal	4000						9		9	0.23
M18	800	24				2	24		24	3.00
M23	800	26	2			5	30		30	3.75
Subtotal	1600						54		54	3.38
45 wks after irradiation										
F58	800	4				1	4		4	0.50
F59	800	4				1	4		4	0.50
F60	800	11				5	11	t(2q+;6q-)× 7	5	0.63
F66	800	1					1		1	0.13
F67	486	2				6	2		2	0.41
F68	800	4					4		4	0.50
F69	800	5					5		5	0.63
F70	800	4					4		4	0.50
Subtotal	6086						35		29	0.47
M56	800	25	1	4		2	31		31	3.88
V57	800	22		2		2	24		24	3.00
Subtotal	1600						55		55	3.44
Control										
63 (45 wks) ^{d)}	800	2				1	2		2	0.25
61 (57 wks)	557	1				1	1		1	0.18
62 (57 wks)	800	2					2		2	0.25
Subtotal	2157						5		5	0.23

^{a), b), c), d)} See the footnotes for Supplementary Table 1.