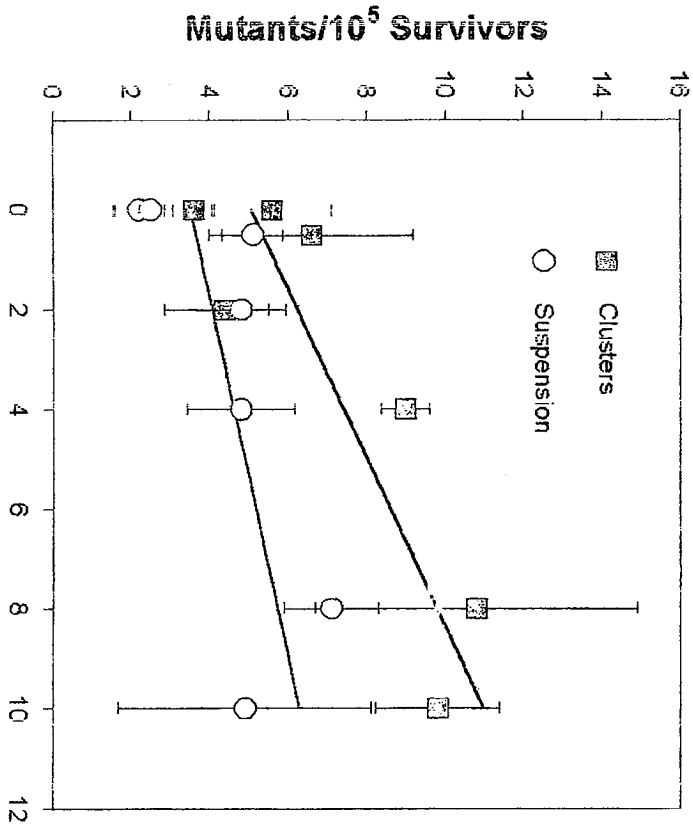
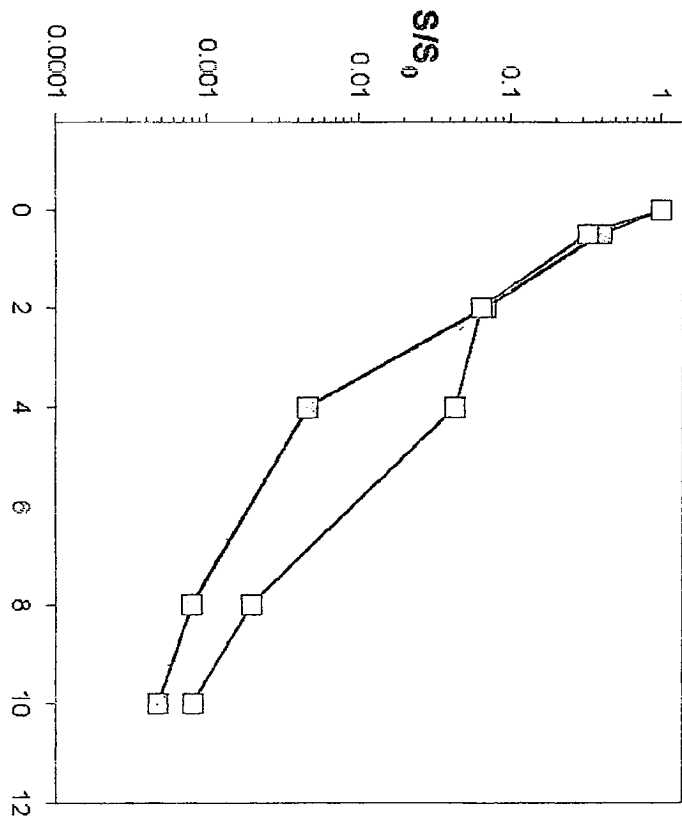


Mutation Induction in V79 Cells: Clusters versus Suspension



Survival of V79 Cells: Clusters versus Suspension

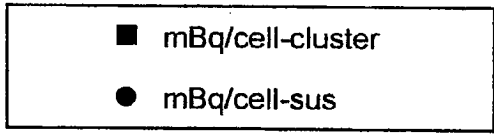
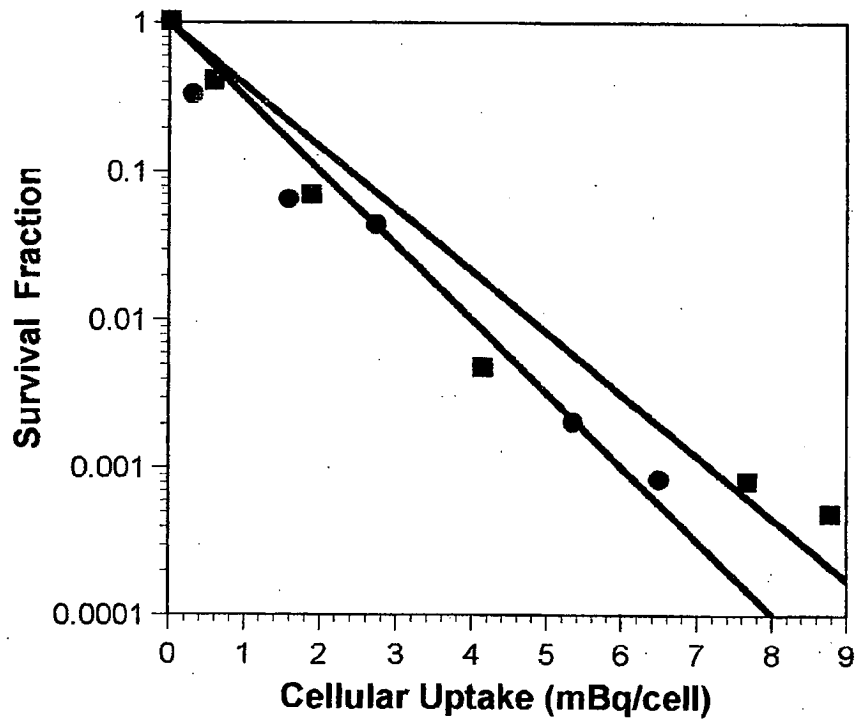


³HdThd Conc (µCi/mL)

µCi/ml □ cluster mut/1.0e5:
Coefficients:
b[0] □ 5.0462654097
b[1] □ 0.5908629442
r² □ 0.7374925351

µCi/ml □ susp mut/1.0e5:
Coefficients:
b[0] □ 3.517440174
b[1] □ 0.2766497462
r² □ 0.4501103641

	SUS SUM
1	1.0000
2	1.0000
3	0.3240
4	0.0642
5	0.0433
6	2.0000e-3
7	8.2000e-4
8	



	Label	A	B	C	D
Label	$\mu\text{Ci/ml}$	mBq/cell-cluster	SF	mBq/cell-sus	SF
1	0	0	1	0	1
2	0.5	0.57	0.4018	0.3	0.3241
3	2.0	1.87	0.0688	1.57	0.0642
4	4.0	4.13	0.0047	2.72	0.0433
5	8.0	7.65	0.0008	5.34	0.002
6	10.0	8.76	0.00048	6.48	0.00082

1- 7 clusters
8- 14 suspension

Cell Count

MS = 50 μ l

Avg. Count

Vol. Contains
10⁶ Cells
(ml)

12/20/99

565
59

672
76

Row	Cell Counts	Avg. Count	Vol. Contains 10 ⁶ Cells (ml)
1	521, 545, 567, 551	554.3	0.450
2	552, 543, 541	545.3	0.458
3	468, 455, 449	457.3	0.547
4	649, 683, 666	666	0.375
5	561, 523, 550	544.6	0.458
6	605, 590, 603	599.3	0.417
7	588, 574, 614	592	0.422
8	750, 767, 739	752	0.332
9	789, 772, 769	776	0.322
10	721, 719, 710	716	0.348
11	630, 666, 639	645	0.387
12	612, 631, 645	629	0.397
13	565, 574, 591	576	0.434
14	638, 610, 580	609	0.410

2/20/99
 d0
 Th 12/23/99
 d3

Aniupam plated 14 F100's @ 10⁶ cells ea.

					Total Cells	Doublings
1	164 184	1.74 x 10 ⁶	0.57 →	1 x 10 ⁶	x3 5.2 x 10 ⁶	2.4
2	179 259 179 215	2.03	0.49 →		6.1	2.6
3	209 152 165 180	1.77	0.56 →		5.3	2.4
4	153 175	1.64	0.61 →		4.9	2.3
5	121 107	1.14	0.88 →		3.4	1.8
6	147 152	1.50	0.67 →		4.5	2.2
7	108 123	1.16	0.86 →		3.5	1.8
8	705 75	.73	1.37 →		2.2	1.1
9	103 80	.92	1.09 →		2.8	1.5
10	89 92	.91	1.10 →		2.7	1.4
11	99 81	.89	1.12 →		2.7	1.4
12	96 125	1.10	0.91 →		3.3	1.7
13	97 75	.86	1.16 →		2.6	1.4
14	102 106	1.04	0.96 →		3.1	1.6

1-7 av 1.57 x 10⁶
 8-14 av 0.92 x 10⁶
 1.7 x diff

M 12/27/99

100 to + clumps

					Total Doublings
1	128x4 82x4	4.2 x 10 ⁶	→	x3 1.3 x 10 ⁷	3.7 6.1
2	99x4 151x4	5.0 x 10 ⁶	→	1.5	3.9 6.5
3	66x5 70x5	3.3		0.99	3.3 5.7
4	74x5	3.7		1.1	3.5 5.8
5	72x5	3.6		1.1	3.5 5.3
6	84x5	4.2		1.3	3.7 5.9
7	70x5	3.5		1.1	3.5 5.3
8	122x5	6.1		1.8	4.2 5.3
9	59x5	3.0		0.9	3.2 4.7
10	89x5	4.5		1.4	3.8 5.2
11	93x5	4.7		1.4	3.8 5.2
12	151x5	7.6		2.3	4.5 6.2
13	84x5	4.2		1.3	3.7 5.1
14	87x5	4.4		1.3	3.7 5.3

Av (4.4 ± 1.2) x 10⁶ → 0.22 10⁶
 Did all the same

12/30/99

	SF ₀₈					X3ml	Doubling	Total Df	
Waters	1	69x5	3.5 x 10 ⁶	0.057	2 x 10 ⁵	1.1E7	3.5	9.6	11.4λ
	2	69x5	3.5 x 10 ⁶	0.057		1.1E7	3.5	10.0	11.4λ
	3	180x5	9.0 x 10 ⁶	0.022		2.7 x 10 ⁷	4.8	10.5	4.4λ
	4	127x5	6.4 x 10 ⁶	0.031		1.9E7	4.2	10.0	6.3λ
	5	143x5	7.2 x 10 ⁶	0.028		2.2E7	4.5	9.8	9.6λ
	6	128x5	6.4 x 10 ⁶	0.031		1.9E7	4.2	10.1	6.3λ
	7	122x5	6.1 x 10 ⁶	0.033		1.8E7	4.2	9.5	6.6λ
Susp	1	117x5	5.9 x 10 ⁶	0.054	3.4 x 10 ⁵	1.8E7	4.2	9.5	6.7λ
	9	86x5	4.3 x 10 ⁶	0.047	2 x 10 ⁵	1.7E7	3.7	8.4	9.3
	10	118x5	5.9 x 10 ⁶	0.034		1.8E7	4.2	9.4	6.8
	11	136x5	6.8 x 10 ⁶	0.029		2.0E7	4.3	9.5	5.9
	12	136x5	6.8 x 10 ⁶	0.027		2.0E7	4.3	10.5	5.9
	13	167x5	8.4 x 10 ⁶	0.024		2.5E7	4.6	9.7	4.8
	14	139x5	7.0 x 10 ⁶	0.029		2.1E7	4.4	9.7	5.7

Av 6.2E6 ± 1.6E6

6TG: 100 μg/ml $\xrightarrow[10\text{ml}]{0.167\text{ml}}$ 1.67 μg/ml = 10⁻⁶ M

Not quite enough medium: #5 P35's plated in MEMS #10 - 1ml MEMS rest = MEMS
Dilutions made in R7.5. #11 is plated in 6ml MEMS + 1ml R7.5.

d17	1/6/00	F+S	P35's	Av.	s.d.	Orig conc	Act. pl. for mutants
		77	63	79	73.0	8.7	5.1E6 2.9E5
		86 ^c	71	85	80.7	8.4	5.7E6 3.2E5
		51	62	45	52.7	8.6	9.6E6 2.1E5
		68	71	66	68.3	2.5	8.6E6 2.7E5
v.sm.		47 ^c	50	56	53.0	4.2	6.3E6 1.8E5
		59	43 ^c	54	52.0	8.2	6.6E6 2.0E5
		54	47	55	52.0	4.4	6.3E6 2.1E5
		63	74	66	67.7	5.7	8.1E6 4.6E5
		93	98	87	92.7	5.5	8.0E6 3.7E5
		58	67	66	63.7	4.9	7.5E6 2.5E5
		77	62	62	67.0	8.7	9.1E6 2.6E5
		56	56	55	55.7	0.58	7.6E6 2.2E5
		48	63	75	62.0	13.5	10.3E6 2.5E5
		69	66	70	68.3	2.1	9.6E6 2.8E5
			Av	65.2	11.9	7.8E6	± 1.6E6

2.76E5 ± 0.73

1/7/00
dl8

	Mutant colonies g/P					Total		x10 ⁵ Per cell/pl	s.d.	Ratio G/P
	Av	s.d.	Av	s.d.	Av	s.d.				
1	5/3	6/5	6/5	7/3	5/7	10.4	1.52	3.6	0.53	1.26
2	6/6	11/10	5/8	11/11	8/13	17.8	4.87	5.6	1.53	0.85
3	7/5	6/7	11/8	4/2	12/7	13.8	5.45	6.6	2.61	1.37
4	2/4	6/8	8/9	3/9	4/6	11.8	4.15	4.4	1.55	0.64
5	8/9	9/8	5/10	7/10	6/9	16.2	1.10	9.0	0.61	0.76
6	7/10	6/14	12/7	6/10	17/19	21.6	8.2	10.8	4.1	0.80
7	7/17	12/6	7/13	10/14	7/10	20.6	3.29	9.8	1.57	0.71
8	4/3	7/7	4/7	5/6	0/7	10.0	3.00	2.2	0.66	0.66
9	3/3	6/9	2/7	2/7	2/6	9.4	3.36	2.5	0.89	0.47
10	5/5	5/7	3/11	8/5	3/12	12.2	1.92	5.1	0.77	0.60
11	7/5	5/10	7/5	4/9	3/7	12.4	1.82	4.8	0.70	0.72
12	7/7	8/5	4/4	5/2	3/8	10.6	3.04	4.8	1.38	1.04
13	5/8	8/13	10/9	9/10	7/10	17.8	3.03	7.1	1.21	0.78
14	7/8	3/4	4/6	10/19	1/7	13.8	9.04	4.9	3.21	0.57