

- Resuspend in ^{cell} MEMA + 5% DMSO according to table ~~cap~~ ^{cap tightly}
- Syringe 5X, transfer 0.5 ml to glass tube

Tube	ml MEMA + 5% DMSO	ml MEMA
1	2	0
2	2	0
3	2	0
4	2	0
5	2	0
6	0	2
7	0	2
8	0	2
9	0	2
10	0	2

- 1 x 100 μ l for cell count, 3 x 100 μ l for cell activity
- Place ^{remaining 1.5 ml} on roller at 10.5°C for 72 h (cap tightly)

$$\frac{1276 \text{ Bq}}{40000} = 0.0319 \frac{\text{Bq}}{\text{cell}} \times 100 \text{ h}$$

3.19 Bq h

11484 Bq S

1.06×10^3

04/15/97

¹³¹IUDR
DMSO

Exp 1

4/15/97

3866

Coll. Cell counts before 72 h rolling

		Aug ± STD
1.	1114, 1061, 1111	1095 ± 30
2.	1217, 1085 , 1124, 1132	1158 ± 52
3.	1028, 1044, 1099	1057 ± 37
4.	956, 1028, 971	985 ± 38
5.	940, 1003, 963	969 ± 32
6.	1092, 1098, 1051	1080 ± 26
7.	1032, 1053, 995	1027 ± 29
8.	954, 874, 952	927 ± 46
9.	967, 869, 944	927 ± 51
10.	1079, 1104, 1045	1076 ± 30

Calibration

~~Fu-252 344~~

Ra-226 → Pb-214 351.9 keV, 2000 pCi standard in well.

Yield 0.371 2000 pCi = 74 dps = 4440 dpm

10 min counting Ra-226 ⇒ 2899 ⇒ 289.9 cpm

$$\text{cpm} = \text{dpm}(y)(e)$$

Efficiency

$$e = \frac{\text{cpm}}{\text{dpm}(y)} = \frac{289.9}{4440(0.371)} = 0.176$$

^{131}I IUBK + 5% DMSO Exp!

4/15/97

Post-Wash ^{131}I Determination

4 of 6

GeLi ~~3000~~ kV

Area in 364.5 keV γ peak, Eff = 0.176
Yield = .371

Medium Counts: 10mL

1. 0

2. 0

3. 1708, 1722, 1519

4. 3233, 4161, 3617

5. 5724, 5661, 5151

6. 0

7. 0

8. 1602, 1755, 1628

9. 3489, 3675, 3230

10. 5813, 5675, 5066

Counts in Dosed Cells: 100mL

1. 0

2. 0

3. 5136, 4980, 4875

4. 7866, 7936, 7703

5. 9274, 9313, 9406

6. 0

7. 0

8. 5382, 5380, 5287

9. 8354, 8020, 7734

10. 10151, 9919, 9639

4/18/97

- Remove tubes from roller (10.5°C) at 11:30 am
- Centrifuge 10 min, 4°C, 2000 rpm
- Decant super, wash 3X with cold wash MEMA
- Resuspend in 2 ml wash MEMA
- Syringe 5X, perform serial dilutions (0.5ml \Rightarrow 4.5ml)
- Seed 25 cm² flasks in triplicate
- After all seeding complete, take 1x 100µl for Coulter and 3x 100µl for cell activity (see below)
- Waited too long! Coulter Counts on following pg. are erratic

Activity Counts:
After 72h

Geli Well, EFF = 0.176

Yield = $\frac{0.812}{0.371}$?

Tube

1 0

2 0

3 3123, 3029, 2909

4 4919, 4882, 4537

5 5768, 5677, 6232

6 0

7 0

8 3115, 3328, 3454

9 4480, 4562, 4541

10 5828, 5826, 5879

4/18/97

Coulter

Cell Counts After 72h roll, wash

- 1) 645, 670, 708
- 2) 726, 722, 729
- 3) 802, 747, 835
- 4) 1201, 1056, 1211
- 5) 1187, 1190, 1171
- 6)
- 7)
- 8) 705, 685, 701
- 9) 533, 539, 534
- 10) 1177, 1172, 1167

not too long

All tubes set
-600 long!

Colonies

1.2	28, 28, 25 = 27	1
2.2	27, 35, 28 = 30	
3.4	18, 20, 21 = 19.7	0.00691
4.4	12, 24, 19 = 18.3	0.00642
5.4	17, 12, 14 = 14.3	0.00501
6.2	35, 40, 37 = 37.3	1
7.2	39, 34, 31 = 34.7	
8.4	19, 18, 18 = 18.3	0.00508
9.4	10, 14, 10 = 11.3	0.00314
10.4	8, 16, 12, = 12	0.0033