

I131-10%.001

Parameters

Date

12/20/01

Experiment No.

I131-10%.001

Investigator

B. Gerashchenko

Cell Line

V79

Modifier

None

Radionuclide

I-131

Half-life (days)

8.02

Radiation Yield

0.812

Radiochemical

[I-131]IdU

Manufacturer/Lot

Our synthesis date 12/12/01

Original Calibration Date/Time

12/13/01 10:57

Present Calibration Date/Time

12/20/01 16:30

Fraction of Cells Labeled

0.1

Original Activity Concentration (MBq/ml)

44.474

Time Elapsed Since Original Calibration (d)

0.193

Present Activity Concentration (MBq/ml)

43.74

Liquid Scintillation Cocktail

None

Volume of LSC Cocktail (ml)

None

Volume/Type Counting Vial

12x75 mm tube

Model of Counter

Packard Cobra

Counting Efficiency

0.783

Activity Added (Date/Time)

12/20/01 16:30

Cells Washed (Date/Time)

12/21/01 7:00

Medium Tubes Counted (Date/Time)

12/21/01 11:57

Cell Tubes Counted (Date/Time)

1/2/02 9:58

Vol. Supernatant Counted (µl)

30

Vol. Suspension Counted Cell Activity (µl)

200

Time Elapsed Between Add and Wash (hr)

14.50

Time Elapsed Between Add and Count (hr)

19.50

Time Elapsed Between Wash and Count (hr)

291.00

Vol. Suspension Coultter (µl)

100

Coultter Manometer Volume (µl)

500

Average Coultter Background Counts

5

Coultter Calibration Parameter

400

Hemocytometer Counting (Yes or No)?

No

Background

Coultter 1	Coultter 2	Coultter 3
5	5	5

I131-10%.001

MediumActivity

Experiment: I131-10%.001
Date: 12/20/01

Tube #	1st	Medium count (CPM) 2nd	3rd	CPM Average	CPM corrected for control	DPM CPM/(y e)	At $\mu\text{Ci/ml}$ on counting	Ao $\mu\text{Ci/ml}$ at addition	Ao KBq/ml at addition
1	91	108	85	104	0	0	0	0	0
2	104	102	136		0	0	0	0	0
3	24993	24402	24827	24741	24636	38749	0.5818	0.6241	23.0928
4	49212	48125	48720	48686	48581	76410	1.1473	1.2307	45.5376
5	103173	106010	102014	103732	103628	162989	2.4473	2.6253	97.1354
6	159409	160026	161272	160236	160131	251860	3.7817	4.0567	150.0986
7	213713	211412	199136	208087	207983	327122	4.9117	5.2690	194.9519
8	272634	266591	266269	268498	268394	422138	6.3384	6.7994	251.5780
9	325274	324115	318702	322697	322593	507384	7.6184	8.1725	302.3812
10	380183	379566	379350	379700	379595	597040	8.9646	9.6166	355.8125

1131-10%.001

CellSuspension

Experiment: 1131-10%.001
Date: 12/20/01

Tube #	Suspension count (CPM)			CPM Average	CPM corrected for control	DPM CPM/(y e)	A _t μCi/ml on counting	A ₀ μCi/ml after uptake	A ₀ kBq/ml after uptake
	1st	2nd	3rd						
1	25	38	33	31	0	0	0.0000	0	0.0000
2	25	32	30	0	0	0	0.0000	0	0.0000
3	6290	6690	7470	6817	6786	10673	0.02404	0.06854	2.5359
4	12820	13660	15140	13873	13843	21772	0.04904	0.13981	5.1730
5	36500	39900	42200	39533	39503	62131	0.13994	0.39897	14.7619
6	35370	34150	35480	35000	34970	55001	0.12388	0.35319	13.0679
7	64790	63370	60120	62760	62730	98663	0.22221	0.63356	23.4416
8	68750	73400	71660	71270	71240	112048	0.25236	0.71951	26.6217
9	96280	104200	108440	102973	102943	161912	0.36467	1.03970	38.4690
10	122640	117420	110900	116987	116956	183952	0.41431	1.18124	43.7057

I131-10%.001

CoulterSurvival

Experiment: I131-10%.001
Date/Time: 12/20/01

Tube #	Coulter count			Average Cells/ml	Hemocytometer Count in Grid			
	1st	2nd	3rd		1st	2nd	3rd	4th
1	3734	3806	3721	3754	1499467			
2	3536	3609	3624	3590	1433867			
3	3491	3534	3616	3547	1416800			
4	3155	2958	2959	3024	1207600			
5	3757	3875	3852	3828	1529200			
6	3619	3632	3576	3609	1441600			
7	3871	3947	3987	3935	1572000			
8	3813	3806	3829	3816	1524400			
9	3645	3609	3718	3657	1460933			
10	3676	3550	3594	3607	1440667			

Tube #	Predicted # Cells Seeded	Actual # Cells Seeded	Colony count			Average	PE (%)	SF Uncorrected	SF Corrected
			1st	2nd	3rd				
1	200	150	90	97	102	90	61.136	1.00	1.0000
2	200	143	80	83	86				
3	200	142	46	60	67	58	40.702	0.6431	0.6658
4	2000	1208	123	144	149	139	11.483	0.1546	0.1878
5	20000	15292	168	174	194	179	1.168	0.0199	0.0191
6	20000	14416	37	46	47	43	0.301	0.0048	0.0049
7	20000	15720	30	34	37	34	0.214	0.0038	0.0035
8	20000	15244	20	29	30	26	0.173	0.0029	0.0028
9	20000	14609	15	17	22	18	0.123	0.0020	0.0020
10	20000	14407	27	22	22	24	0.164	0.0026	0.0027

Experiment: 12/20/01
 Date/Time:

Tube #	Activity Conc. (kBq/ml)	Activity/Cell (mBq/cell)	Survival Uncorrected	Survival Corrected
1	0.000	0.000	1.0000	1.0000
2	0.000	0.000	0.6431	0.6658
3	23.093	17.899	0.1546	0.1878
4	45.538	42.837	0.0199	0.0191
5	97.135	96.534	0.0048	0.0049
6	150.099	90.648	0.0038	0.0035
7	194.952	149.119	0.0029	0.0028
8	251.578	174.637	0.0020	0.0020
9	302.381	263.318	0.0026	0.0027
10	355.813	303.371		

