

BIOASSAY GUIDELINES

FOR URINALYSES FOR SELECTED RADIONUCLIDES

Nuclide	Elapsed Interval (Weeks)	Action Levels (dpm/ml)		Assumed Values		Minimum Values			
		Verif.	Invest.	Bkgd Rate (cpm)	Count Effic. (%)	Sample Volume (ml)	Count Time (min)		
H-3	1	3,700	94,000			2.0	5		
	8	160	4,300	<30	>50%	2.0	5		
	Max: 12	350	750			2.0	5		
C-14	1	90	2,800					2.0	10
	2	64	1,800			2.0	10		
	3	42	1,200	<30	>80%	2.0	10		
	Max: 4	28	830			2.0	10		
P-32	1	20	640					2.0	10
	2	29	450			<30	>80%	2.0	10
	3	30	310	2.0	10				
	Max: 4	28	217	2.0	10				
P-33	1	130	3,800					2.0	10
	4	280	2,000	<30	>80%	2.0	10		
	8	210	760			2.0	10		
	Max: 12	120	300			2.0	10		
S-35	1	290	1,600					2.0	10
	4	100	660	<30	>80%	2.0	10		
	8	65	200			2.0	10		
	Max: 12	25	48			2.0	10		
Cl-36	1	80	2,300					2.0	10
	4	200	1,400	<30	>80%	2.0	10		
	8	180	660			2.0	10		
	Max: 12	130	320			2.0	10		
Cr-51	1	860	24,000					2.0	10
	4	475	3,300	<30	>30%	2.0	10		
	Max: 8	40	150			2.0	10		

FOR THYROID MONITORING FOR RADIOIODINES

Elapsed Interval (weeks)	<u>I-125 Action Levels (nCi in thyroid)</u>		<u>I-131 Action Levels (nCi in thyroid)</u>	
	Verify	Investigate	Verify	Investigate
1	21	530	9.4	230
2	38	470	9.9	120
4	59	370	5.4	34
8	72	230	0.8	3
13	64	120	0.05	1

If the nuclide(s) you work with are not listed above, or if your counting instrument has a significantly different background count rate or counting efficiency from that listed above, contact the RSO for appropriate maximum intervals, sample volumes and counting times.