

100 μ l 12-7-1 (DNA) - just add scintillant and shake.

7,151 cpm/4 min \rightarrow 1787.75 cpm
from page 55, this represented 10% of counts in
the entire 12-7-5 sample \Rightarrow 17877.5 counts

\therefore 12-7-5 originally had 17,877.5 cpm

final volume before HPLC: 5 ml \Rightarrow 3575.5 $\frac{\text{cpm}}{\text{ml}}$

\Rightarrow 321.8 cpm per 0.09 ml NOTE: the
hydrolysate gave 2168 cpm (on facing
page) for 90 μ l!

reshake + count sample: 8345 cpm

12-17-76

6. Sample: 12-17-4P ADDUCT

20 ml of 12-15-1

fraction volume: 17.0 ml

radioactivity: 14196
14117

\rightarrow 2.01×10^6 cpm TOTAL

12-21-76

7. Sample: 12-21-5

11.6 ml onto column + 4.4 ml rinse from 12-15-1

fraction volume: 17.0 ml

8540 counts/4 min / 30 μ l
8566

} 2.128×10^4 cpm/ml

\Rightarrow 1.212×10^6 counts TOTAL

12-20-76 Determination of the % of Radioactivity in Hydrolysate Attributable to Adduct

Sample: 12-7-5 (it is in stoppered 15 ml tube)
 Sample is slightly opaque from DNA which hasn't ever been spun down

$$\text{Count } 90 \mu\text{l: } \frac{8629}{8717} / 4 \rightarrow 2168 \text{ cpm}$$

Sample 12-20-1P = injection into HPLC of 90 μl ; The adduct peak was collected in a 2.0 ml volumetric and diluted to volume with $\sim 3 \text{ ml}$ of H_2O .

- count 2 $\frac{1}{2}$ ml portions

$$\begin{array}{l} \text{sample a} : 427 \text{ cpm} \\ \text{sample b} : 419 \text{ cpm} \end{array} \}$$

These figures should be $\frac{1}{4}$ of 2168 = 542 cpm

$$\therefore \left. \begin{array}{l} \frac{427}{542} = .79 \\ \frac{419}{542} = 0.77 \end{array} \right\} \text{So, only } \sim 80\% \text{ of the radioactivity put onto column comes from the adduct.}$$

Sample 12-20-2P = duplicate

$$0.5 \text{ ml: } \cancel{735 \text{ cpm}} \quad 721.6 \quad \text{too much! - recount ✓}$$