Adduct Quantitation

10-25-1:
\[
\left( \frac{7527 \text{ cpm}}{0.1 \text{ ml}} \right) \left( 19.5 \text{ ml} \right) = 1.468 \times 10^6 \text{ cpm} \rightarrow \frac{1}{32} \text{ cpm} \\
\text{total} \\
\rightarrow 2.022 \times 10^6 \muCi
\]

\[
\frac{2.022 \muCi}{1.875 \muCi} = 1.078 \muM \text{ adduct}
\]

\[
\left( \frac{478 \mu g}{\mu M} \right) \left( 1.078 \right) = \frac{515.4 \mu g \text{ adduct}}{10-25-1}
\]

10-25-2:
\[
\left( \frac{10976 \text{ cpm}}{0.1 \text{ ml}} \right) \left( 16 \text{ ml} \right) = 1.756 \times 10^6 \text{ cpm} \rightarrow 5.322 \times 10^6 \text{ cpm} \text{ total}
\]

\[
\rightarrow 2.419 \muCi
\]

\[
\rightarrow 1.290 \muM \text{ adduct}
\]

\[
\rightarrow \frac{616.7 \mu g \text{ adduct}}{10-25-2}
\]
Final Processing of 10-21-1

All but 50 ml of 10-21-1 (from JE-4 DNA) has been processed. The remainder will be put through the column in lots of 25 and 25 ml.

1. Preparation of Sample 10-25-1

Source: 25 ml of 10-21-1

No problems

adduct volume = 19.5 ml = 10-25-1

Count 100 µl →

\[ \frac{76,300}{74,232} \] 75.266% 10 min

2. Preparation of Sample 10-25-2

Source: 10-25-2 obtained from 25 ml 10-21-1

No problems

Publishable Chromatogram

adduct volume = 16 ml

100 µl →

\[ \frac{111,410}{108,118} \] 109, 764 counts/10 min