Acridinium Ester Labeling Worksheet
to be used with Enzo Life Sciences Catalog No. ADI-907-001

Calculations:

1. Amount of Material to be Labeled: _____ mg
2. Molecular Weight of Material: _____ gms/mole (i.e. daltons)
3. Moles of Material to be Labeled:

   Amt. from #1 = _____ mg _____ = _____ moles

   MW from #2 **x** 1,000 (_____ gms/mole **x** 1,000)
4. Ratio of Acridinium Ester (A^+) to be added (we suggest 1 to 5 fold): _____
5. Moles of Acridinium Ester to be added:

   moles from #3 **x** Ratio from #4 = _____ moles **x** ____ X = _____ moles of A^+
6. µgs of Acridinium Ester needed:

   moles from #5 **x** $6.3255x10^8$ = _____ moles **x** $6.3255x10^8$ = _____ µg of A^+
7. µLs of Acridinium Ester to be added to the Material to be labeled:

   µgs from #6 = _____ µg = _____ µL of A^+

   2 µg/µL 2 µg/µL

Labeling Flow:

1. Pipet the Material to be labeled into a test tube. Add a micro stirbar.
2. Add the amount of Acridinium Ester solution (_____ µL of A^+ Solution, from Step 7 above)to the Material to be labeled. Vortex. Stir the solution at room temperature for 30 minutes.
3. Add 10µL of the 10% lysine solution to the tube, vortex.
4. Stir the solution at room temperature for 15 minutes.
5. Apply the labeled material to the prepared column and collect the eluant into tube 1.
6. Add 800µL of column buffer to the tube which contained the labeled material, vortex, and apply this solution to the column and collect this eluant also into tube 1.
7. Adding 1mL at a time, apply column buffer and collect the fractions into separate tubes for a total of 12-14 tubes.
8. Pipet 1µL from each tube into duplicate tubes (or wells) and read in a luminometer.
9. After plotting the column profile, pool the fractions selected, vortex, aliquot and store long term at -20°C.