Calculation of Working Stock Concentration for TPA

1 mg = 10^{-3} g

10 mg = 10^{-2} g

mol = 6.02 

x = \frac{10^{-3}}{6.02} \text{ g/mol}

x = 1.6 \times 10^{-5} \text{ mol/l}

2000 x Stock Solution = 0.1 \text{ mM } (10^{-4} \text{ M})

Y = \frac{1.6 \times 10^{-5} \text{ mol/l}}{10^{-4} \text{ mol/l}} = 0.16 \text{ ml}

= 162 \text{ ml}

0.1 \text{ ml at } \frac{1}{2000} = 0.05 \text{ ml}

\approx 30.5 \text{ mg/ml (Stock Solution)}

0.05 \text{ ml} \times 6.02 = 0.30 \text{ mg/ml = 61.78 mg/ml}

For a Conc. of 0.1 mM reconstituted in 162 ml

* I reconstituted the 1 ml of TPA in 1 ml of 100% DMSO

= 162 more concentrated

Aliquot into 10 ml quantities and add 100 ml 100% DMSO to each tube to give a final conc. \approx 0.1 mM (2000 x)

Cyclosporin Concentration for T cell Suppression in Primary B lymphocyte infections

0.1 mg/ml \rightarrow 0.5 mg/ml (No more) in RPMI/FBS

0.8 mg \rightarrow 0.5 mg/ml

(3 ml in 30 ml)

Cyclosporin