Conversions

Grams to molar

- $ug/ml = uM \cdot MW[kDa]$:
- $ug/ml = nM \cdot MW[kDa]/1000$:
- $ng/ml = nM \cdot MW[kDa]$:

$$\frac{ug}{ml} = \frac{umol}{L} \cdot \frac{1\,mol}{10^6\,umol} \cdot \frac{MW\,[kDa] \cdot 10^3\,g}{mol} \cdot \frac{10^6\,ug}{g} \cdot \frac{1\,L}{10^3\,ml}$$

$$\frac{ug}{ml} = \frac{nmol}{L} \cdot \frac{1\,mol}{10^9\,nmol} \cdot \frac{MW\,[kDa] \cdot 10^3\,g}{mol} \cdot \frac{10^6\,ug}{g} \cdot \frac{1\,L}{10^3\,ml}$$

$$\frac{ng}{ml} = \frac{nmol}{L} \cdot \frac{1\,mol}{10^9\,nmol} \cdot \frac{MW\,[kDa] \cdot 10^3\,g}{mol} \cdot \frac{10^9\,ng}{g} \cdot \frac{1\,L}{10^3\,ml}$$

Molar to grams (inverse of above)

- $uM = ug/ml \,/\, MW[kDa]$
- $nM = (ug/ml)/MW[kDa] \cdot 1000$:
- $nM = ng/ml \,/\, MW[kDa]$: