

## Question 2 (correction)

On the originally posted SQ Answer key, there was a slight error in the answer to question 2f. The correct solution is below:

f) Determine  $K_{cat}$  for *E. coli*  $\beta$ -galactosidase. **Show your calculations, and include units!**

$K_{cat}$  (*E. coli*) =  $V_{max}$  *E. coli* / [E<sub>tot</sub>]; Y intercept =  $1/V_{max}$  = 0.12 mL\*min/nmol ONP

$$V_{max} = 8.33 \text{ nmol ONP/mL}^* \text{min}$$

$$K_{cat} = \frac{8.33 \text{ nmol ONP/mL}^* \text{min}}{2.5 \times 10^{-11} \text{ moles/mL}} = 3.33 \times 10^{11} \text{ U/moles}$$