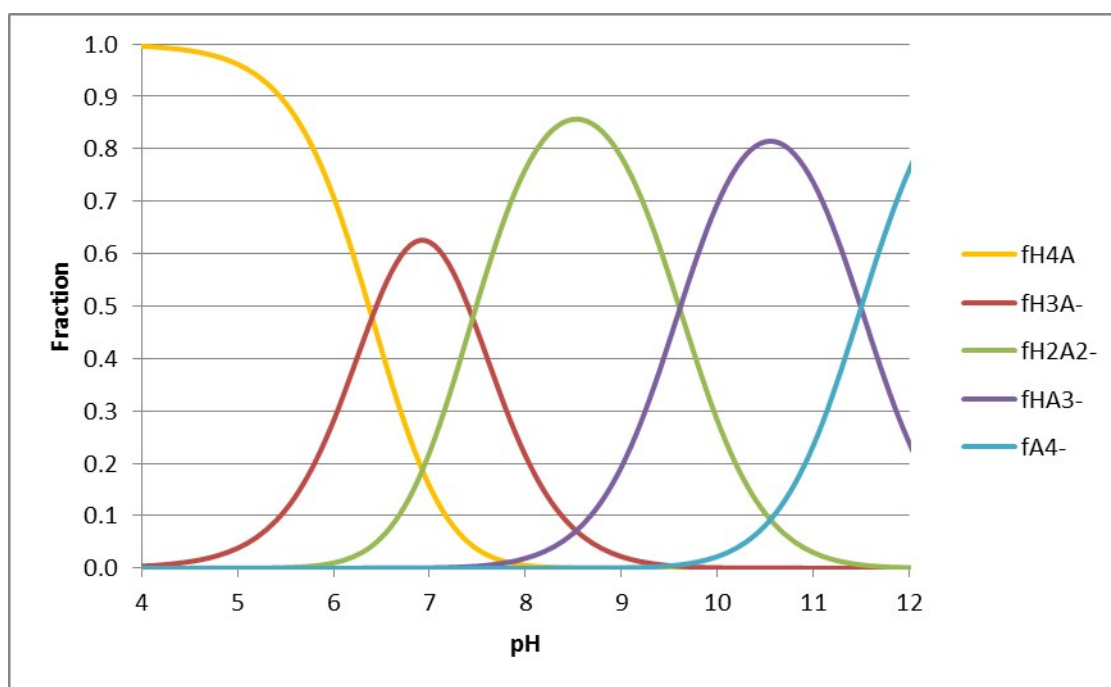


## Electronic Supplementary Information

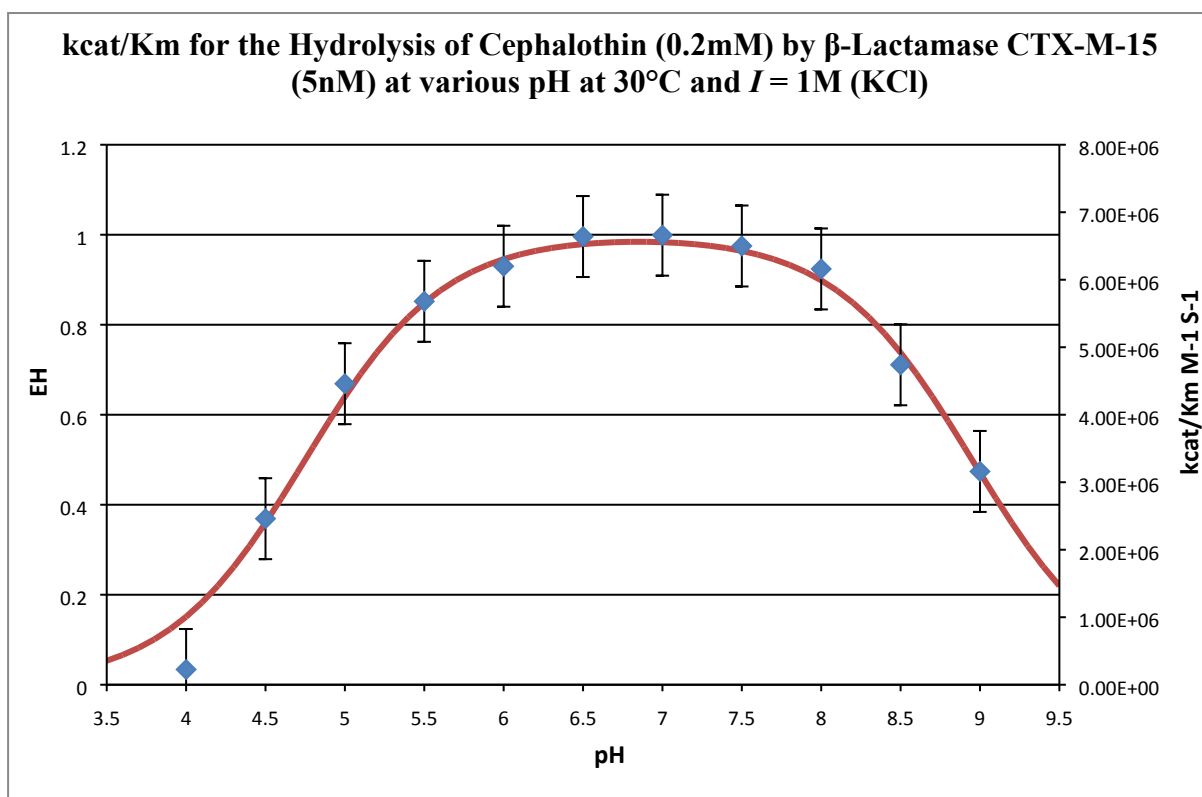
Mono- and di- anions of ellagic acid are both effective inhibitors of the serine  $\beta$ -lactamase CTX-M-15

Nathan Talbot, Nicholas T. Powles and Michael. I. Page

1. Speciation plot for ellagic acid in water 25°C; calculated fractions of ionic species using  $pK_a$ 's = 6.45, 7.45, 9.61 and 11.50



2. pH-rate profile for the CTX-M-15 catalysed hydrolysis of cephalothin and fraction of active enzyme EH.  $pK_a^1 = 4.75$  and  $pK_a^2 = 8.95$



3. A comparison of the fraction of active enzyme CTX-M-15 as EH (left-hand axis and blue line) with the calculated total second-order rate constant ( $M^{-1}s^{-1}$ ) for the inhibition of CTX-M-15 (right-hand-axis and red line) as a function of pH.

