

**S6 Table: Cloning scheme for non-reactive 3kptC variants (GSGESG linker and MBP sequence from pMAL-c2 vector)**

<b>3kptC<sup>T</sup>(N512A)</b>	<b>3kptC<sup>C</sup>(K417A)</b>	<b>3kptC<sup>C</sup>(E472Q)</b>
PCR: 28 + 29 3kptC <sup>T</sup> -GSGESG-MBP as template	PCR: 30 + 31 3kptC <sup>C</sup> as template	PCR1: 32 + 33 PCR2: 34 + 35 3kptC <sup>C</sup> in pQE-9 vector as template

Number of primers used correlate with the primer list in S1 Table.