



**Figure S7. Kinetic analysis of free scFv according to different interaction models.**

2-fold dilutions of cleaved aABA-scFv (40-1.25 nM) were used. (a) Sensorgrams were globally fitted to a simultaneous  $k_a/k_d$  1:1 Langmuir interaction model. (b) SDS-PAGE analysis of the cleaved scFv purified fraction revealed the presence of a secondary band of  $\approx 32.5$  kDa. In order to test whether this unidentified band has any binding activity to immobilised ABA, the sensorgrams were globally fitted to a competing reactions (heterogeneous analyte) interaction model. The sizes and proportions of the two bands estimated by SPR (32.6% active scFv) were assumed in the analysis. (c) Sensorgrams were globally fitted to a 2-state interaction model. (d) Simulation of the contribution of the two competing analytes based on the kinetic constants calculated from the competing reactions fit (b).