



**Supplemental Figure 3.** Changes in kinetic parameters for TIMP-1/gelatinase A interaction resulting from TIMP-1 aberration. The active MMP-2 was kinetically assayed with increasing concentrations of TIMP-1:mock (A) or TIMP-1:GnT-V (B) in the presence of fluorogenic substrate. The first-order binding constant ( $k$ ) was determined by fitting the progress curve to eq.1 in Materials and Methods. Insets show  $k$ 's as a function of TIMP-1 concentration. Active MMP-2/TIMP-1 (C) complexes were prepared by incubation of equimolar amounts ( $1 \mu\text{M}$ ) of gelatinases and TIMP-1 at  $37^\circ\text{C}$ . The complex dissociation was achieved by diluting the complexes 1,000-fold in a cuvette containing a fluorogenic substrate. The progression curve for the production of fluorescent product was recorded.