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and Impairs Activation via Talin**

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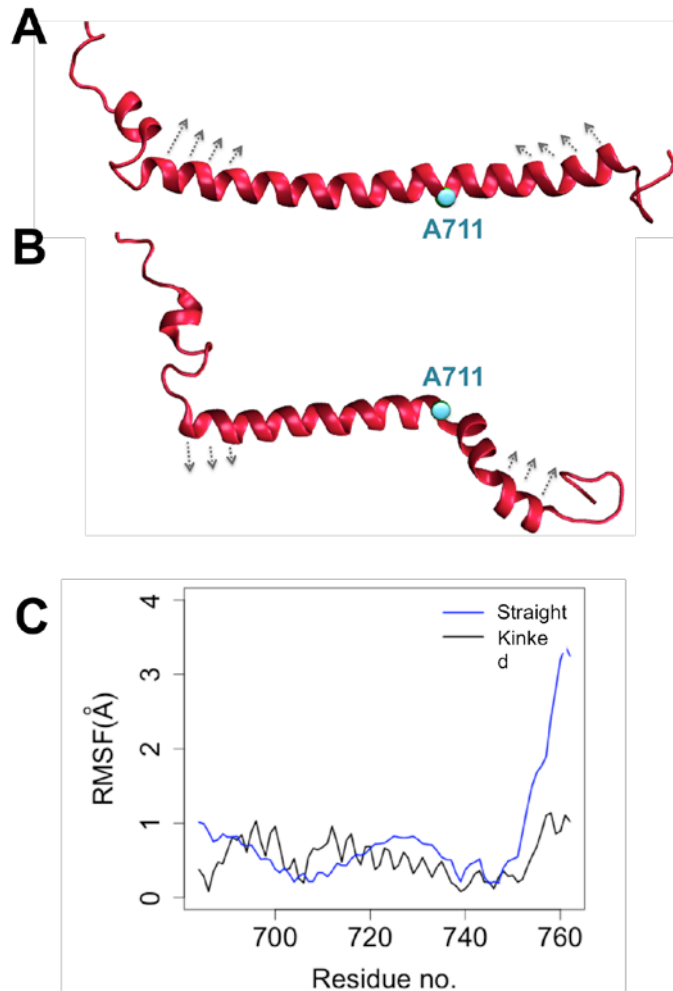
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**Figure S1. The effect of the induced kink in  $\beta_3$ -TMD on mechanical modes of  $\beta_3$ .** **A)** The final configuration of the talin-bound structure of  $\beta_3$ -TMD in  $\alpha_{IIb}\beta_3$ -C simulations is straight. The NMA of straight  $\beta_3$ -TMD shows an in-phase motion of the N-TMD and C-TMD segments of  $\beta_3$ . Dashed arrows show the direction of motion in the first bending mode of the structure. **B)** Conversely, motions of the N-TMD and C-TMD regions go out of phase in the kinked structure (last frame of  $\alpha_{IIb}\beta_3$ -B) and A711 acts as a joint. **C)** The RMSF along TMD of the first bending mode of the straight conformation is smooth, while the RMSF of the kinked structure is jagged.