## α1-FANGs—Protein Ligands Selective for the α-Bungarotoxin site of the α1-Nicotinic Acetylcholine Receptor

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Supplemental Figure 1. Plot of  $\Delta G_{unfolding}$  versus inverse temperature of  $\alpha$ 1-FANG1 and derivatives. Direct comparison of  $\Delta G_{unfolding}$  with 1/T for  $\alpha$ 1-FANG ligands using the experimentally derived circular dichroism melting data shows the different  $\Delta H$  contributions (slope) of each protein to overall stability. When extrapolated to 3.25E-03 (30°C) to compare with historical data, the high stability of  $\alpha$ 1-FANG3 versus parent clones is clear.



Supplemental Figure 2. Determination of  $\alpha$ 1-FANG3 K<sub>on</sub> and K<sub>off</sub> rates via radiolabeled binding assays. A) K<sub>on</sub> of  $\alpha$ 1-FANG3 was determined by the pulldown of excess <sup>35</sup>S labeled  $\alpha$ 1-FANG3 against  $\alpha$ 211 immobilized on beads. K<sub>on</sub> was fit using excel and determined to be 3.9E5. B) K<sub>off</sub> of  $\alpha$ 1-FANG3 was determined by a direct competition of  $\alpha$ -Btx with <sup>35</sup>S labeled  $\alpha$ 1-FANG3 bound to  $\alpha$ 211 immobilized on beads.