

## Enhanced anti-metastatic bioactivity of an IGF-Trap re-engineered to improve physicochemical properties

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**Running Title:** Distinct pharmacodynamic properties of bio-engineered IGF-TRAPs

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& The authors of this manuscript have no competing financial or non-financial interests to report.

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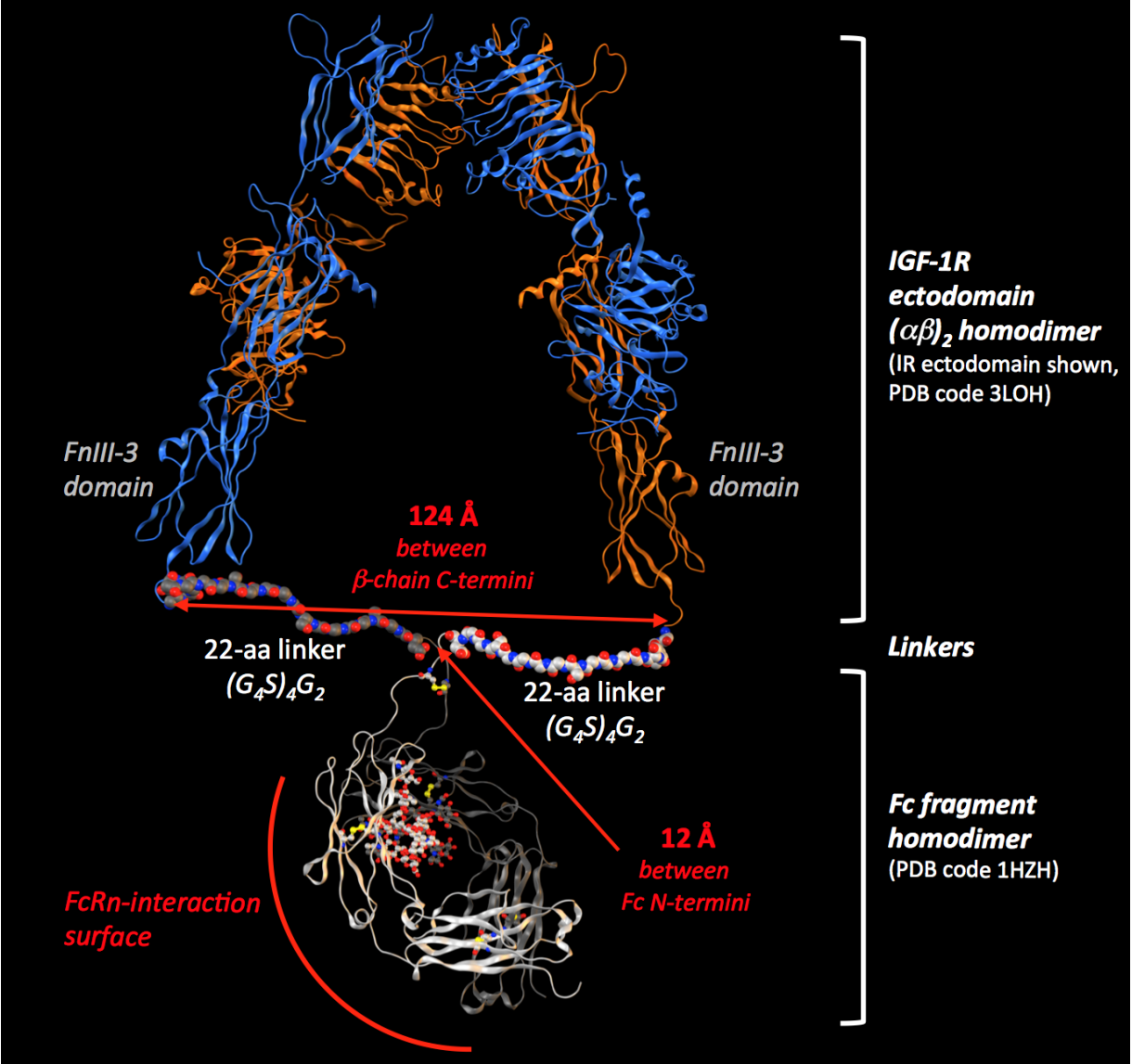
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## Supplementary Figure legends

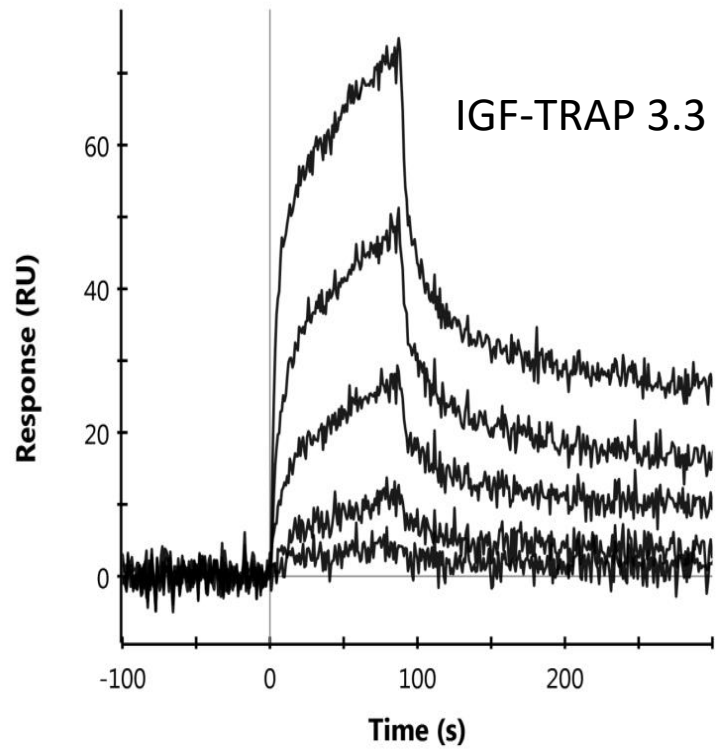
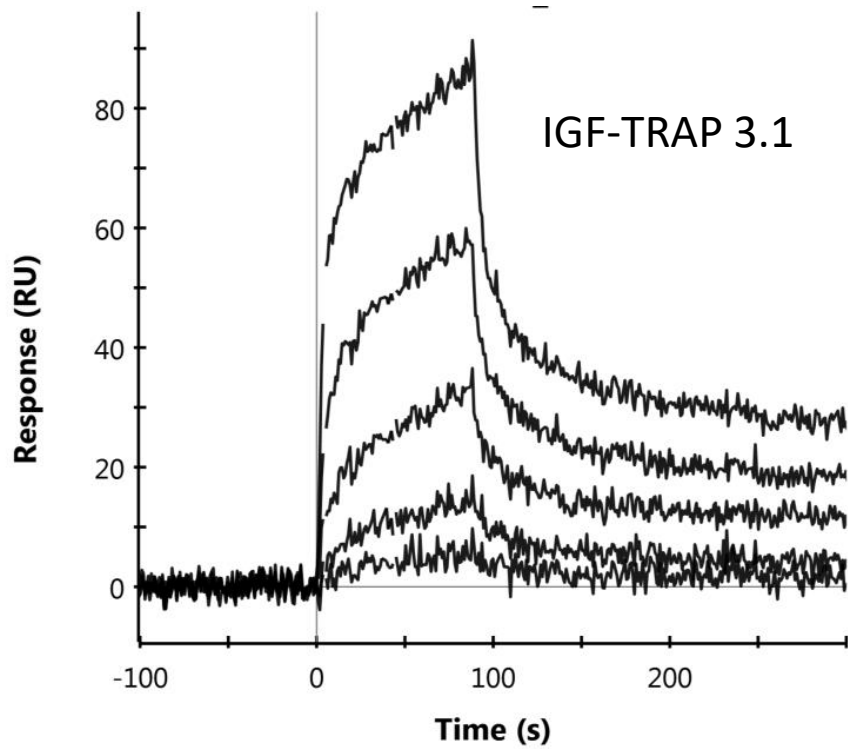
**Figure S1. A proposed 3D model of the IGF-TRAP.** The extracellular domain of IGF-1R and the fused Fc domain of human IgG<sub>1</sub> are based on the known crystal structures of the ectodomain of hIR and the Fc domain of a hIgG<sub>1</sub>, respectively.

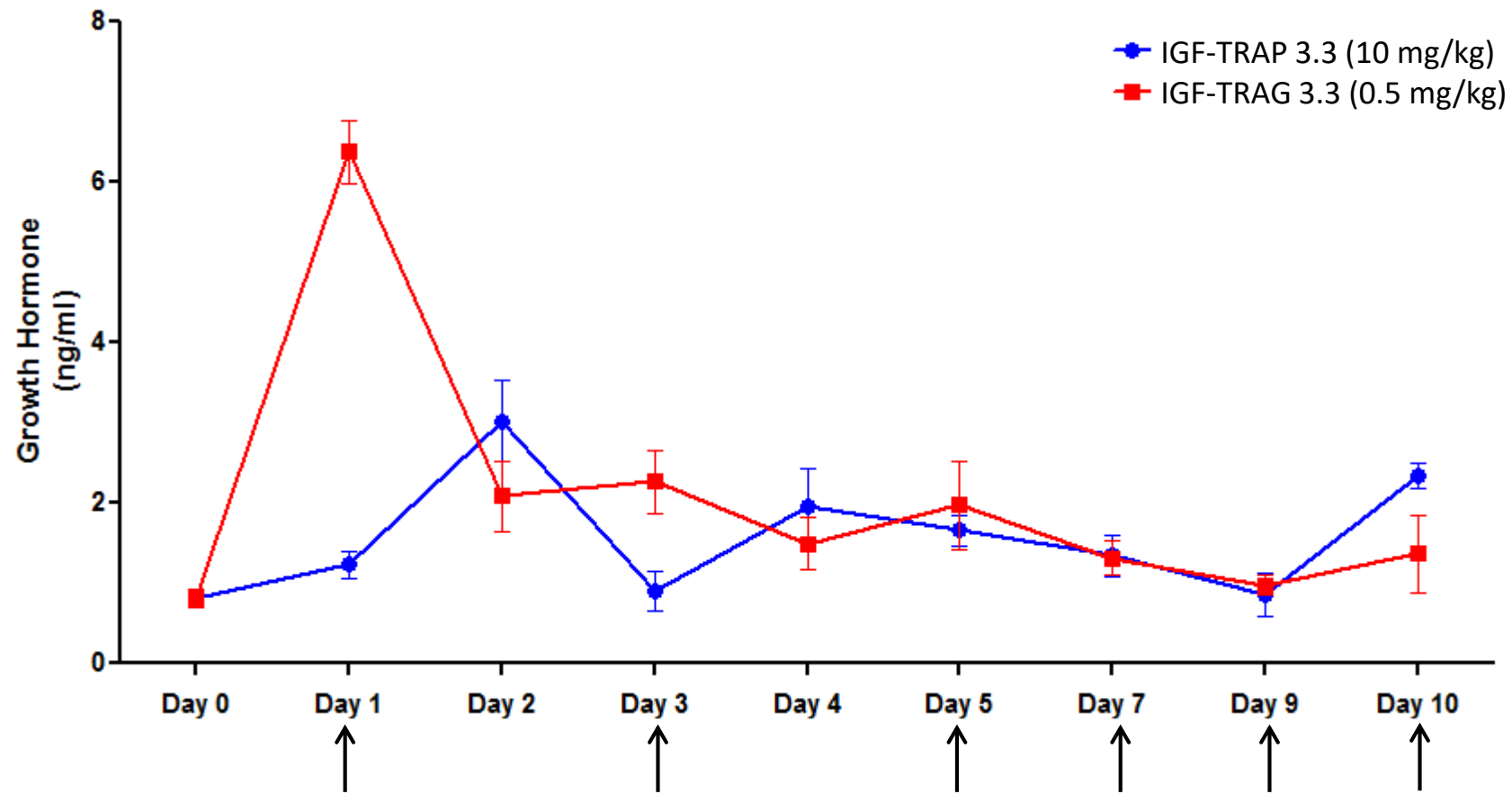
**Figure S2. IGF-TRAPs 3.1 and 3.3 bind to the FcRn with similar affinities.** Shown are SPR sensorgrams of IGF-TRAP 3.1 and IGF-TRAP 3.3 flowing over 80 RUs of C-terminally biotinylated FcRn on a neutravidin sensor surface. The apparent  $K_D$ 's based on an equilibrium fit gave similar results for each of the two IGF-TRAPs.

**Figure S3. IGF-TRAP 3.3 injections alter circulating growth hormone (GH) levels.** Blood was collected daily from mice injected with 0.5 or 10 mg/kg IGF-TRAP 3.3 on alternate days, as indicated. Shown are mean circulating GH levels ( $\pm$ SD) based on 3 animals per time point as measured by ELISA.



Supplementary Fig S1





**Supplementary Fig S3**