

Article

# **$^{89}\text{Zr}$ -labeled Domain II-Specific scFv-Fc ImmunoPET Probe for Imaging Epidermal Growth Factor Receptor In Vivo**

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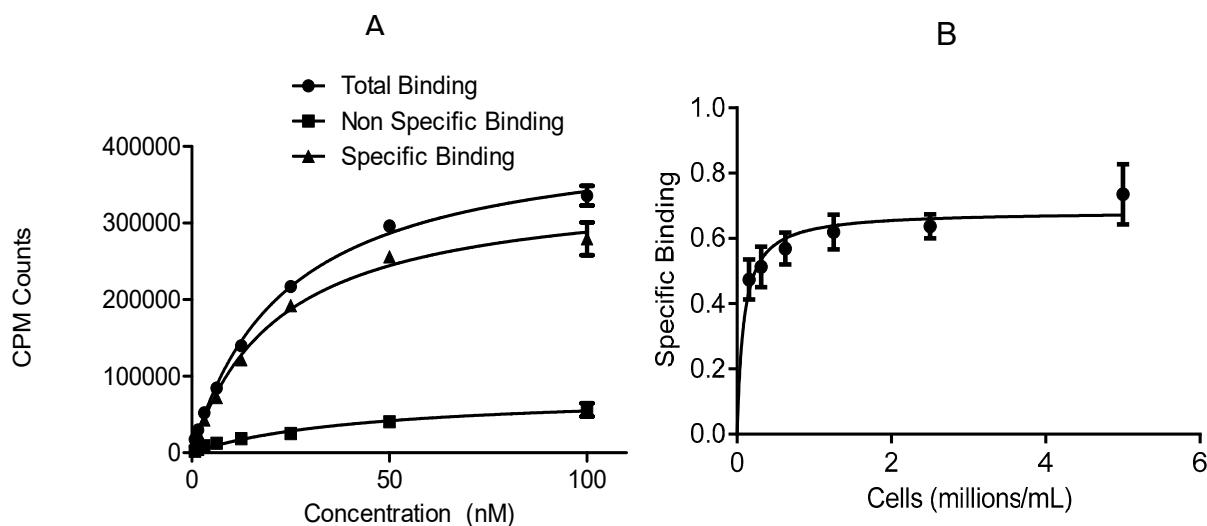
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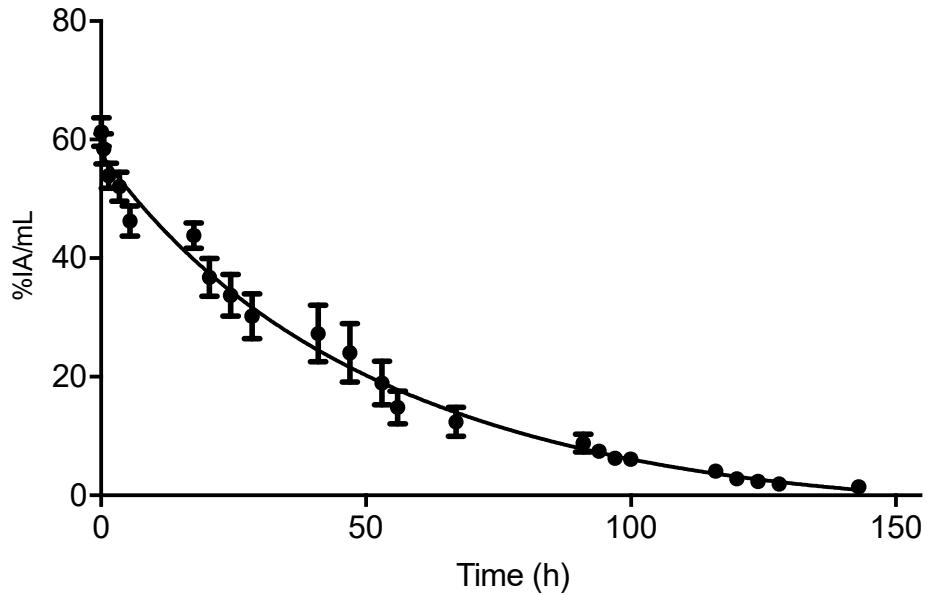
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## Supplementary Figures

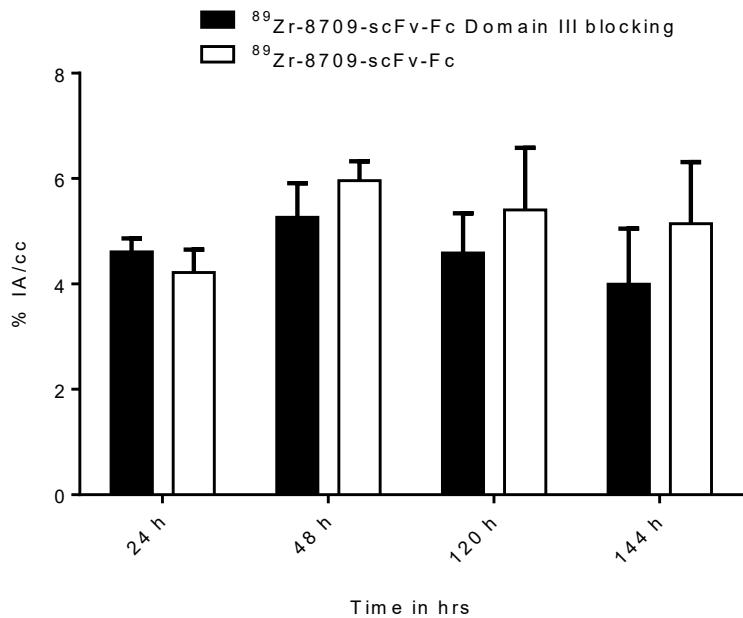


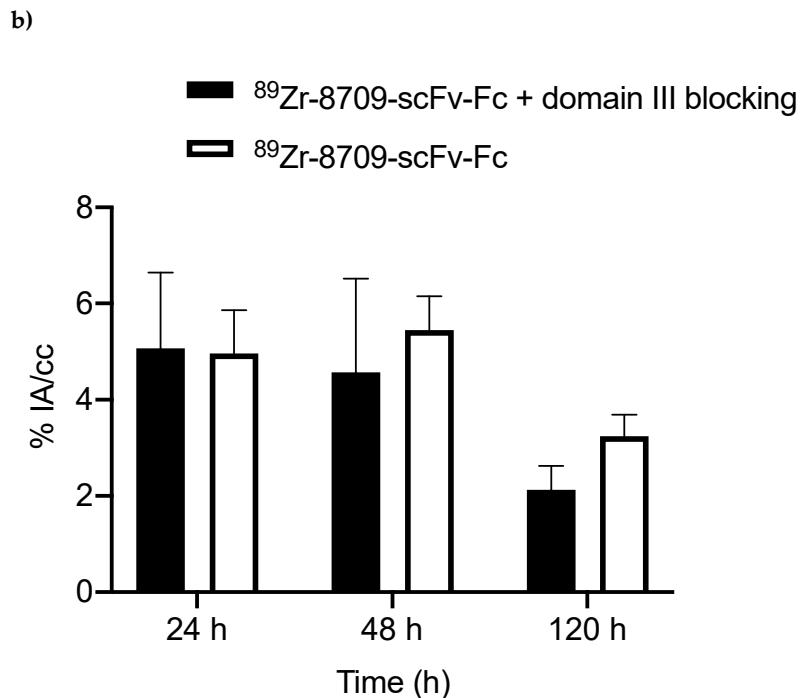
**Figure S1.** A) Saturation radioligand binding assay of  $^{89}\text{Zr}$ -8709-scFv-Fc in EGFR positive DLD-1 cells. B) Immunoreactive assay for  $^{89}\text{Zr}$ -8709-scFv-Fc in EGFR positive DLD-1 cells.



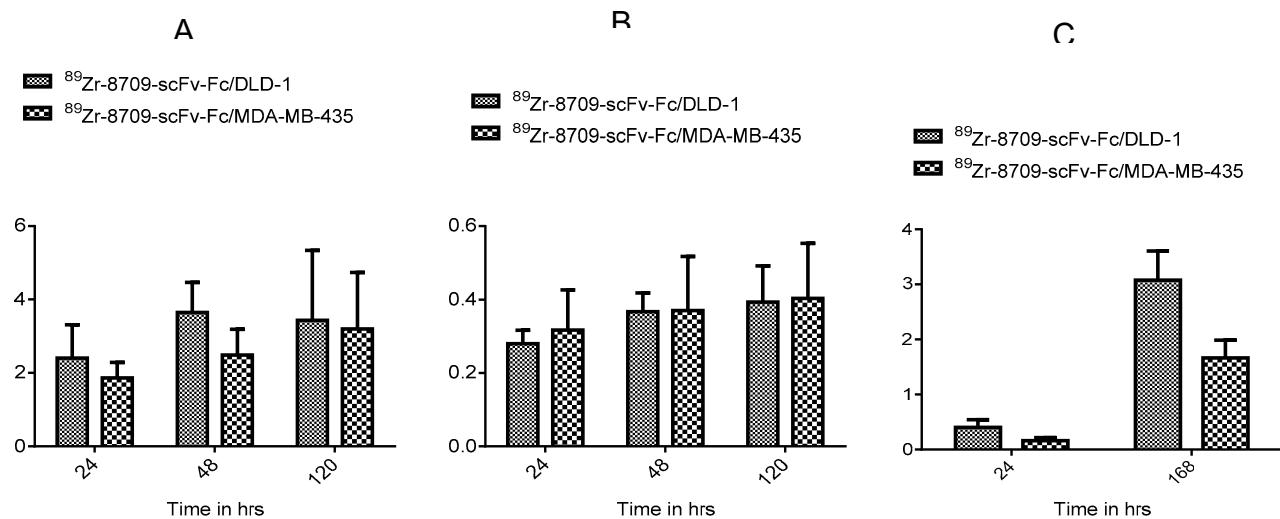
**Figure S2.** Pharmacokinetics of  $^{89}\text{Zr}$ -8709-scFv-Fc in healthy Balb-C mice. Blood values were expressed as % injected activity per mL (% IA/mL) +/- SEM.

a)





**Figure S3.** Tumor ROI quantification of microPET/CT images of mice pre-injected with nimotuzumab (domain III) prior to administration of  $^{89}\text{Zr}$ -8709-scFv-Fc. a) DLD-1 tumor bearing mice pre-dosed with nimotuzumab followed by  $^{89}\text{Zr}$ -8709-scFv-Fc, and b) MDA-MB-231 tumor bearing mice pre-dosed with nimotuzumab followed by  $^{89}\text{Zr}$ -8709-scFv-Fc



**Figure S4.** Tumor to normal organ ratios of  $^{89}\text{Zr}$ -8709-scFv-Fc at different times post-injection (using microPET/CT image analysis (A & B) and biodistribution data (C)). A) Tumor/muscle ratio. B) Tumor/liver ratios. C) Tumor/blood (data from biodistribution).

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