

**Supplemental Table 1.** Biodistribution of <sup>86</sup>Y-labeled 19G9 antibody constructs 24 hours post-injection in male Nu/Nu mice implanted with subcutaneous LNCaP tumors. Results shown as percentage of initial dose recovered in each tissue (%ID/gram) and standard deviation (SD).

Tissue	IgG	scFv	diabody	miniantibody
	%ID/g (SD)			
Blood	15.8 (4.0)	0.039 (0.041)	0.134 (0.036)	3.98 (0.94)
Lung	6.58 (0.65)	0.11 (0.02)	0.68 (0.12)	2.64 (0.45)
Liver (all)	5.21 (0.99)	0.57 (0.10)	4.70 (1.1)	11.0 (3.7)
Spleen	5.86 (0.87)	0.36 (0.07)	2.21 (0.61)	5.03 (0.83)
Kidney	3.68 (0.68)	11.8 (3.7)	51.4 (9.4)	11.1 (2.4)
Muscle	2.19 (0.50)	0.058 (0.018)	0.24 (0.08)	0.98 (0.31)
Fat	2.70 (0.93)	0.082 (0.039)	0.64 (0.45)	1.46 (0.28)
Heart	4.22 (0.77)	0.085 (0.013)	0.58 (0.12)	2.56 (0.54)
Brain	0.59 (0.15)	0.0005 (0.002)	0.016 (0.005)	0.14 (0.02)
Bone	2.44 (0.60)	0.20 (0.04)	1.00 (0.18)	2.13 (0.68)
Testes	2.27 (0.28)	0.077 (0.018)	0.49 (0.070)	1.71 (0.24)
Prostate	2.91 (0.16)	0.072 (0.025)	0.50 (0.44)	1.24 (0.56)
Pancreas	1.73 (0.32)	0.073 (0.022)	0.38 (0.10)	1.05 (0.25)
Tumor	20.2 (2.0)	0.54 (0.13)	3.72 (0.76)	13.1 (3.6)
Skin	4.57 (0.74)	0.29 (0.067)	1.29 (0.53)	3.06 (0.67)
Stomach	1.24 (0.50)	0.15 (0.029)	0.47 (0.15)	0.95 (0.63)
Intestine (all)	1.87 (0.22)	0.15 (0.021)	0.63 (0.064)	1.27 (0.83)