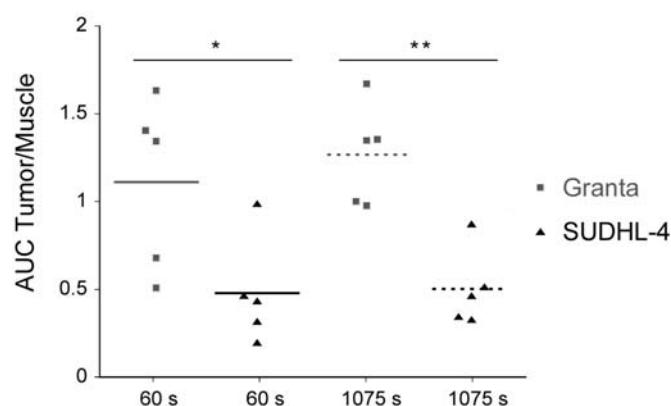


SUPPLEMENTAL TABLE 1. Biodistribution of Radioiodinated α CD20 Fab 24 Hours After Injection

| (%ID/g) | ^{125}I -Fab-ABD | | ^{125}I -Fab-PAS ₂₀₀ | |
|-----------------|---------------------------|-----------------|--|-----------------|
| | Granta-519* | SUDHL-4 | Granta-519* | SUDHL-4 |
| Tumor | 12.3 \pm 3.5 | 5.79 \pm 1.93 | 2.41 \pm 0.76 | 1.22 \pm 0.33 |
| Blood | 11.5 \pm 0.2 | 15.1 \pm 4.0 | 0.59 \pm 0.24 | 1.34 \pm 0.31 |
| Heart | 3.54 \pm 0.45 | 4.52 \pm 1.57 | 0.19 \pm 0.09 | 0.77 \pm 0.68 |
| Lung | 5.36 \pm 0.41 | 6.98 \pm 2.29 | 0.43 \pm 0.18 | 0.81 \pm 0.17 |
| Liver | 2.03 \pm 0.08 | 2.88 \pm 0.69 | 0.18 \pm 0.06 | 0.43 \pm 0.10 |
| Spleen | 1.65 \pm 0.13 | 2.82 \pm 0.91 | 0.25 \pm 0.06 | 0.49 \pm 0.12 |
| Kidney | 2.63 \pm 0.32 | 4.13 \pm 1.19 | 0.92 \pm 0.33 | 1.94 \pm 0.44 |
| Adrenal gland | 2.75 \pm 0.47 | 2.34 \pm 0.99 | 0.37 \pm 0.12 | 0.44 \pm 0.21 |
| Pancreas | 1.31 \pm 0.17 | 2.05 \pm 0.30 | 0.19 \pm 0.07 | 0.38 \pm 0.06 |
| Stomach | 2.31 \pm 0.24 | 2.51 \pm 0.31 | 0.59 \pm 0.31 | 0.84 \pm 0.27 |
| Small intestine | 1.29 \pm 0.05 | 1.62 \pm 0.27 | 0.18 \pm 0.08 | 0.48 \pm 0.14 |
| Large intestine | 0.95 \pm 0.13 | 1.27 \pm 0.38 | 0.15 \pm 0.08 | 0.56 \pm 0.19 |
| Muscle | 0.64 \pm 0.06 | 0.82 \pm 0.15 | 0.11 \pm 0.04 | 0.15 \pm 0.05 |
| Bone | 0.85 \pm 0.19 | 1.37 \pm 0.70 | 0.14 \pm 0.03 | 0.20 \pm 0.06 |
| Skin | 3.02 \pm 0.13 | 2.70 \pm 0.34 | 0.31 \pm 0.09 | 0.49 \pm 0.12 |
| Brain | 0.28 \pm 0.03 | 0.34 \pm 0.11 | 0.02 \pm 0.01 | 0.04 \pm 0.01 |

*Data are from Mendler et al. (8).



SUPPLEMENTAL FIGURE 1. DCE MRI perfusion study. Tumor-to-muscle ratios of initial and total areas under the curve (AUC) calculated from the gadolinium-concentration curves (Fig. 4) show significantly lower perfusion of SUDHL-4 tumors than Granta-519 tumors (initial AUC until 60 s after bolus injection of gadolinium-DTPA (AUC-60): $P = 0.0317$; total AUC until 1,075 s after bolus injection (AUC-1075): $P = 0.0015$).

SUPPLEMENTAL VIDEO 1. Three-dimensional reconstruction and animation of Granta-519 xenograft from 250 optical sections (750 µm) stained *in vivo* with lectin for vessels (red) and Cy5-Fab-PAS₂₀₀ (green). See legend for Figure 3.

SUPPLEMENTAL VIDEO 2. Three-dimensional reconstruction and animation of SUDHL-4 xenograft from 150 optical sections (750 µm) stained *in vivo* with lectin for vessels (red) and Cy5-Fab-PAS₂₀₀ (green). See legend for Figure 3.

SUPPLEMENTAL VIDEO 3. Blowup of Granta-519 xenograft showing perivascular distribution of Fab-PAS₂₀₀ (green). See legend for Figure 3.

SUPPLEMENTAL VIDEO 4. Blowup of SUDHL-4 xenograft showing intravascular localization of Fab-PAS₂₀₀ (green). See legend for Figure 3.

SUPPLEMENTAL VIDEO 5. Focusing through a Granta-519 xenograft as shown in Figure 3.