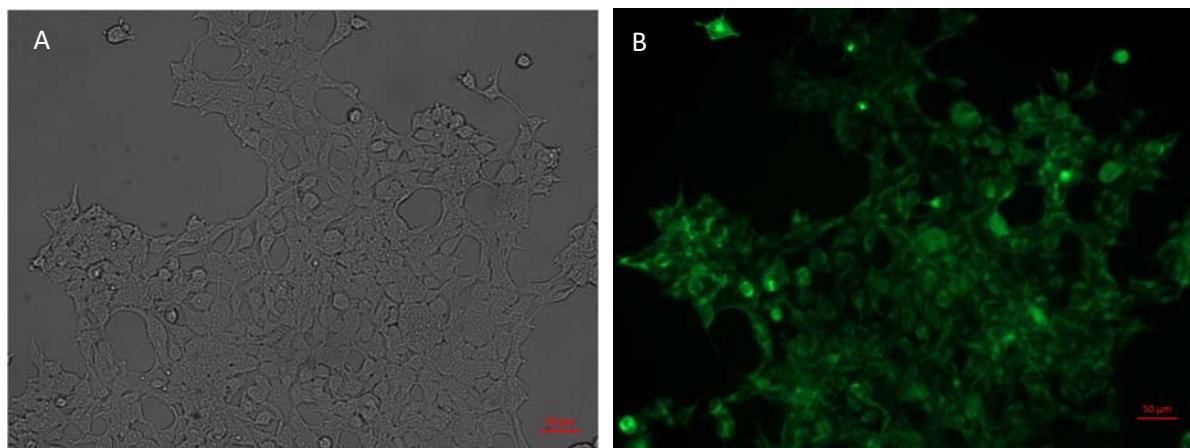
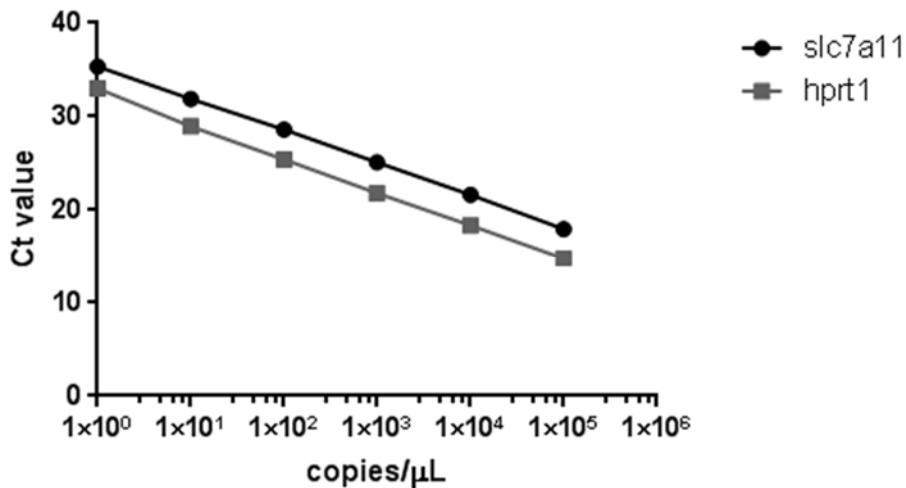


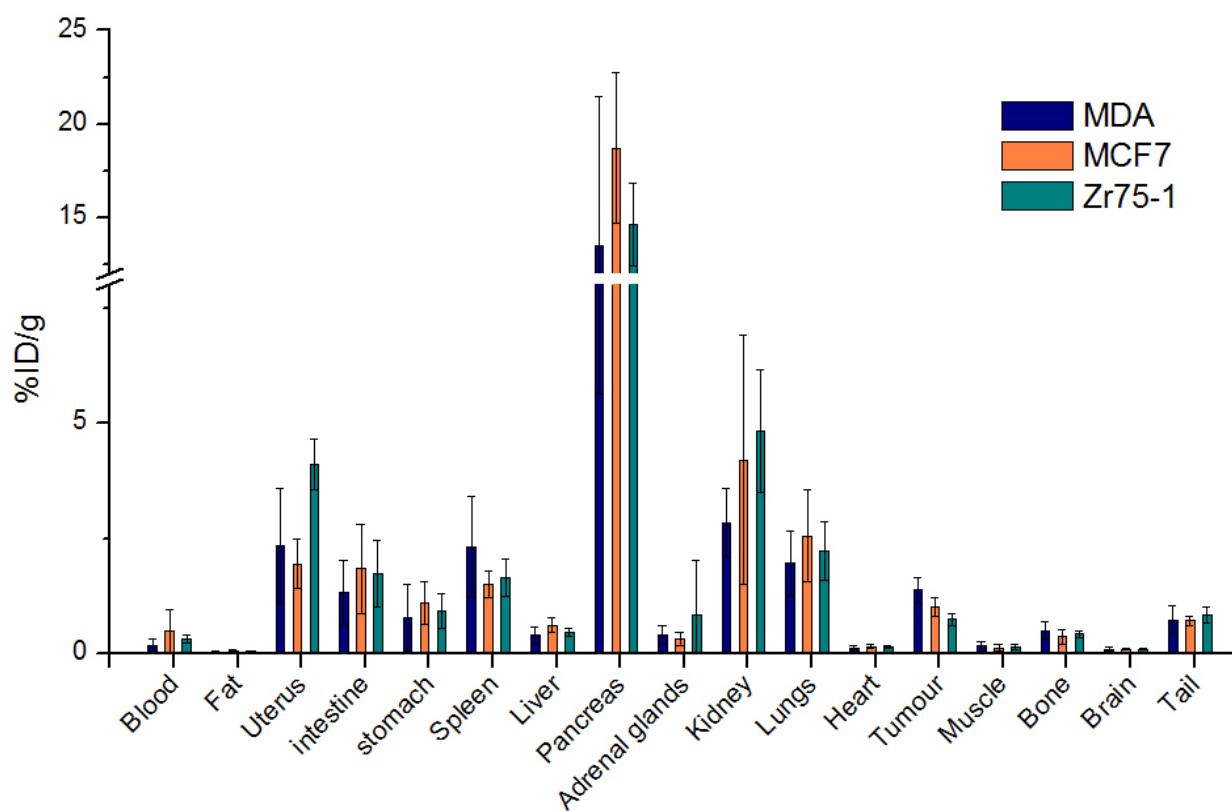
SUPPLEMENTAL FIGURE 1. HPLC traces of radiosynthesis of <sup>18</sup>F-FASu.



SUPPLEMENTAL FIGURE 2. Bright-field image (A) and green fluorescent image (B) for HEK::xCT cells. 20x magnification.



SUPPLEMENTAL FIGURE 3. Standard curve for absolute qPCR experiments.



SUPPLEMENTAL FIGURE 4. Biodistribution of MDA-MB-231, MCF-7 and ZR-75-1 in tumor-bearing mice at 2 h after injection.  $n = 9$  for MDA-MB-231;  $n = 8$  for MCF-7 and ZR-75-1.

SUPPLEMENTAL TABLE 1. Standard curve parameters

Target	Efficiency (%) (n = 3)	R <sup>2</sup> (n = 3)
SLC7A11	94.720	0.998
HPRT1	89.144	0.998

SUPPLEMENTAL TABLE 2. PCR cycling conditions

Denaturation	98°C	30 sec
40 cycles	98°C	10 sec
	SLC7A11: 60°C HPRT1: 58°C	10 sec
	72°C	20 sec
	72°C	2 min
Hold	4°C	

SUPPLEMENTAL TABLE 3. qPCR cycling conditions

Hot start	95°C	15 sec
40 cycles	95°C	10 sec
	SLC7A11: 60°C HPRT1: 58°C	60 sec