Fig. 1

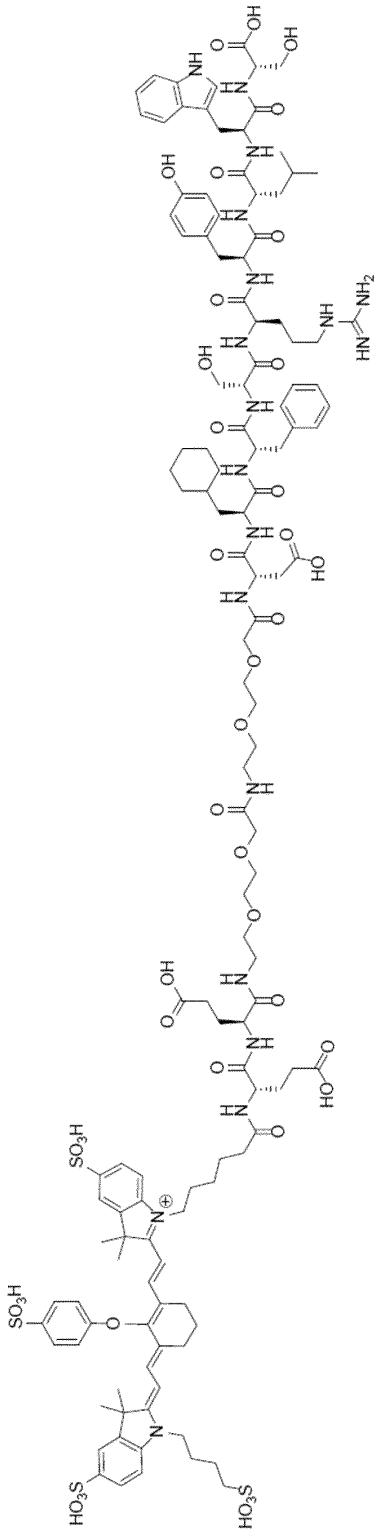


Fig. 2

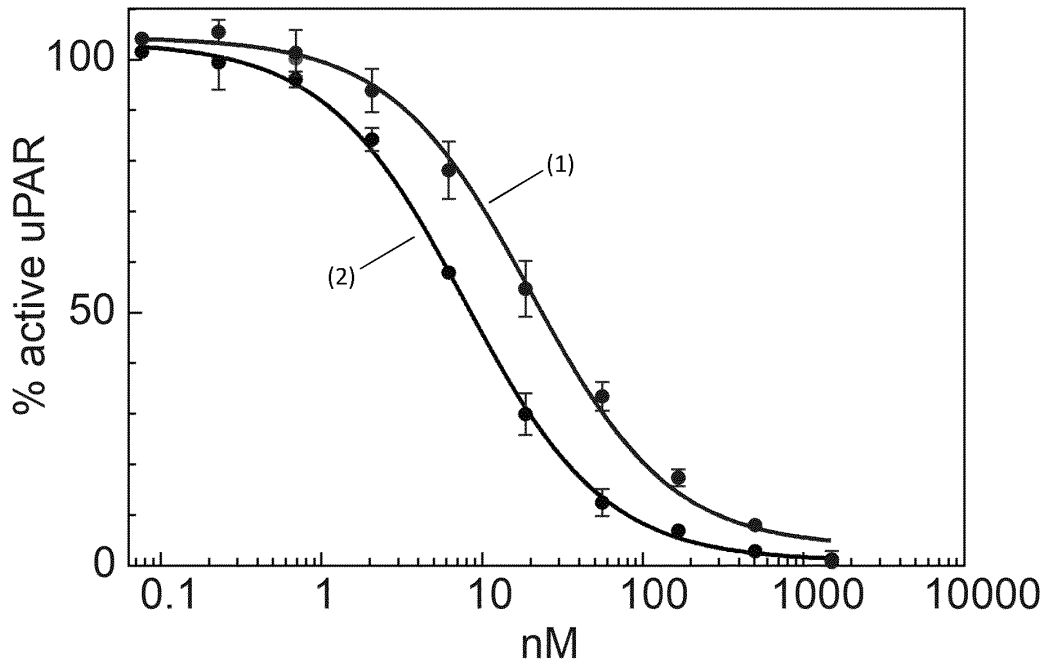


Fig. 3

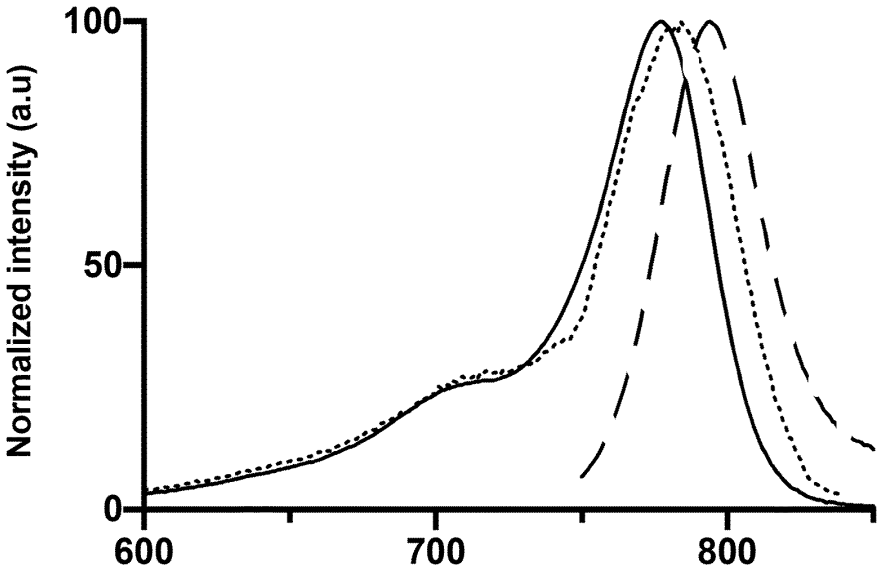

100
50
0
Normalized intensity (a.u)
600
700
800

Fig. 4

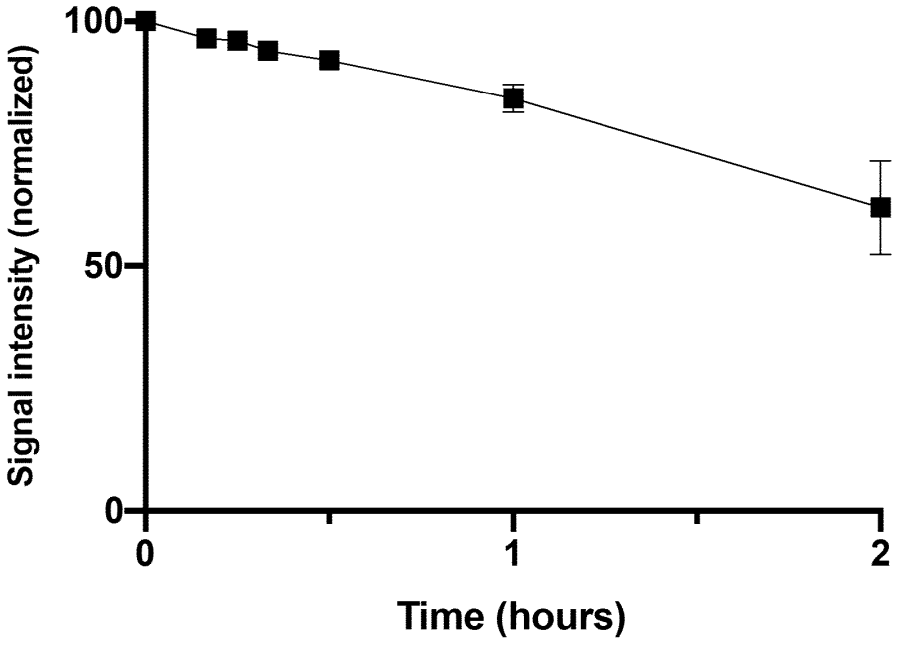

100
50
0
Signal intensity (normalized)
0
1
2
Time (hours)

Fig. 5

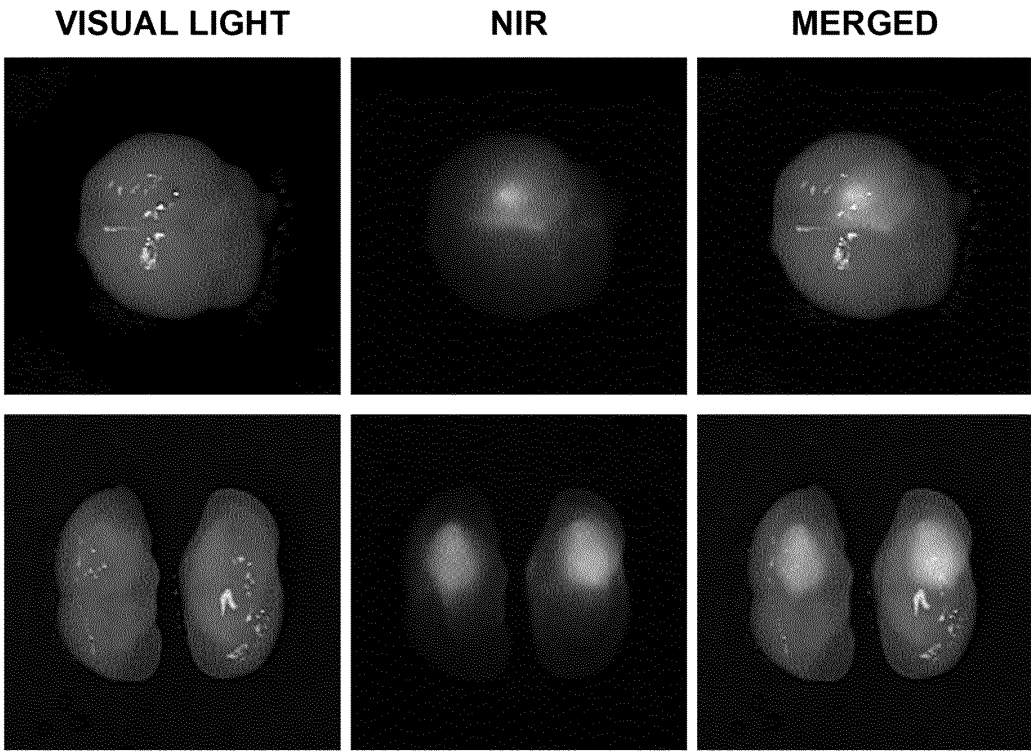


Fig. 6

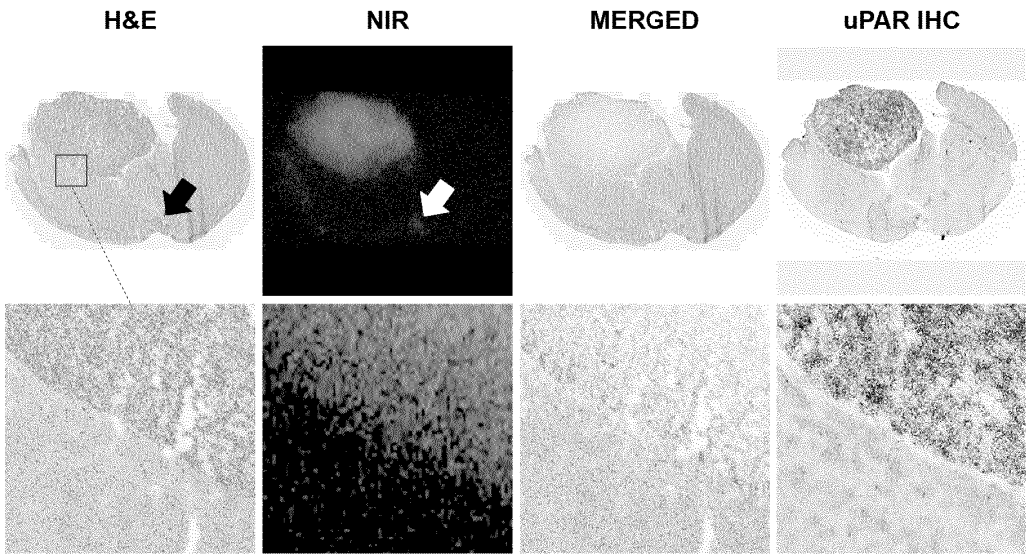


Fig. 7

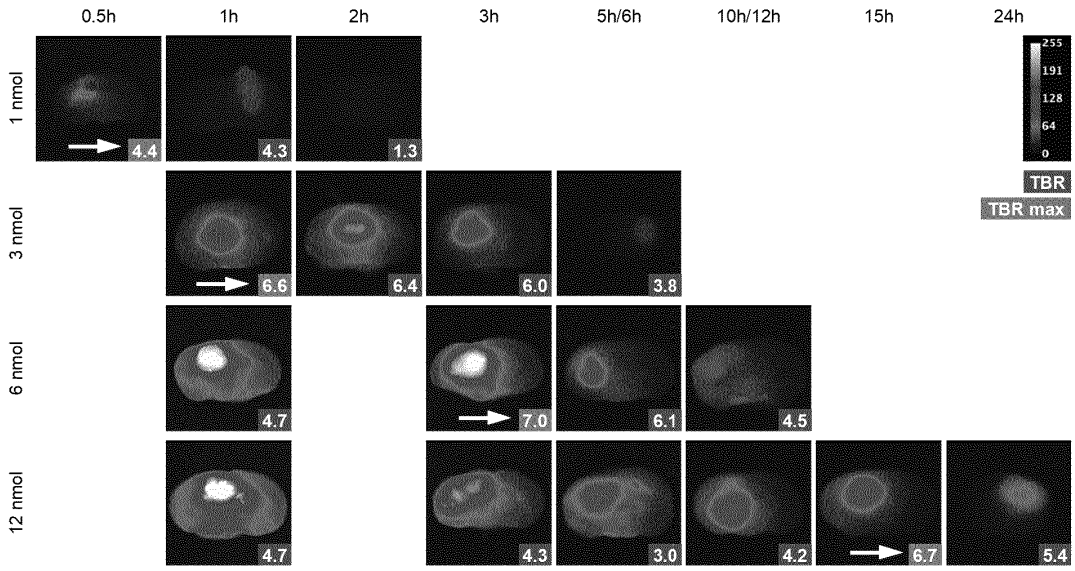

0.5h
1h
2h
3h
5h/6h
10h/12h
15h
24h
1 nmol
3 nmol
6 nmol
12 nmol
4.4
4.3
1.3
6.6
6.4
6.0
3.8
4.7
7.0
6.1
4.5
4.7
4.3
3.0
4.2
6.7
5.4
255
191
128
64
0
TBR
TBR max

Fig. 8

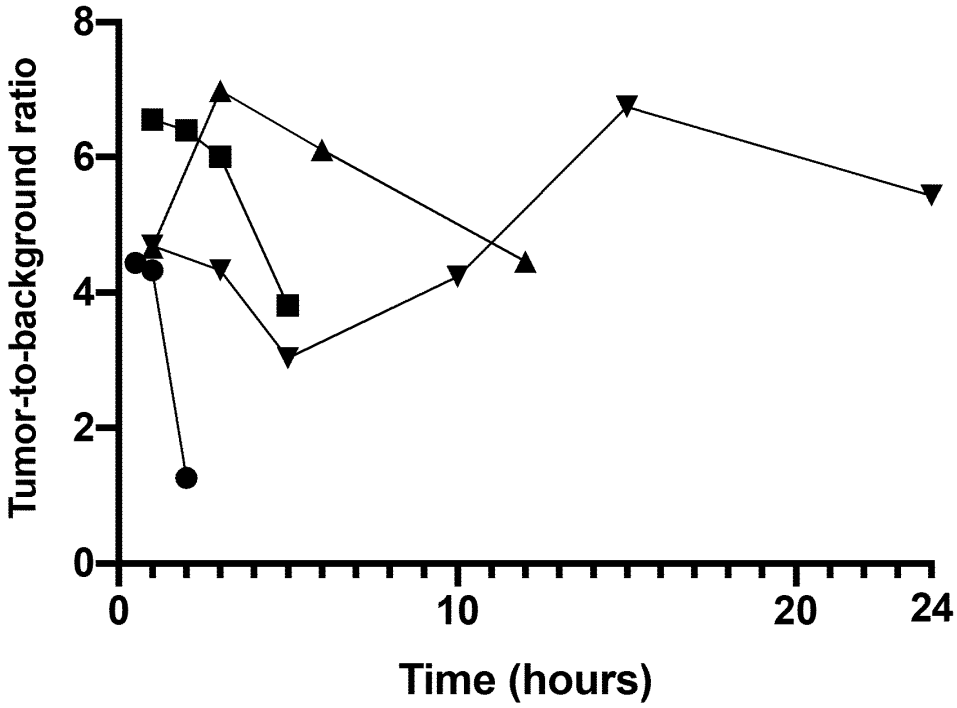

Tumor-to-background ratio
Time (hours)
0
2
4
6
8
0
10
20
24

Fig. 9

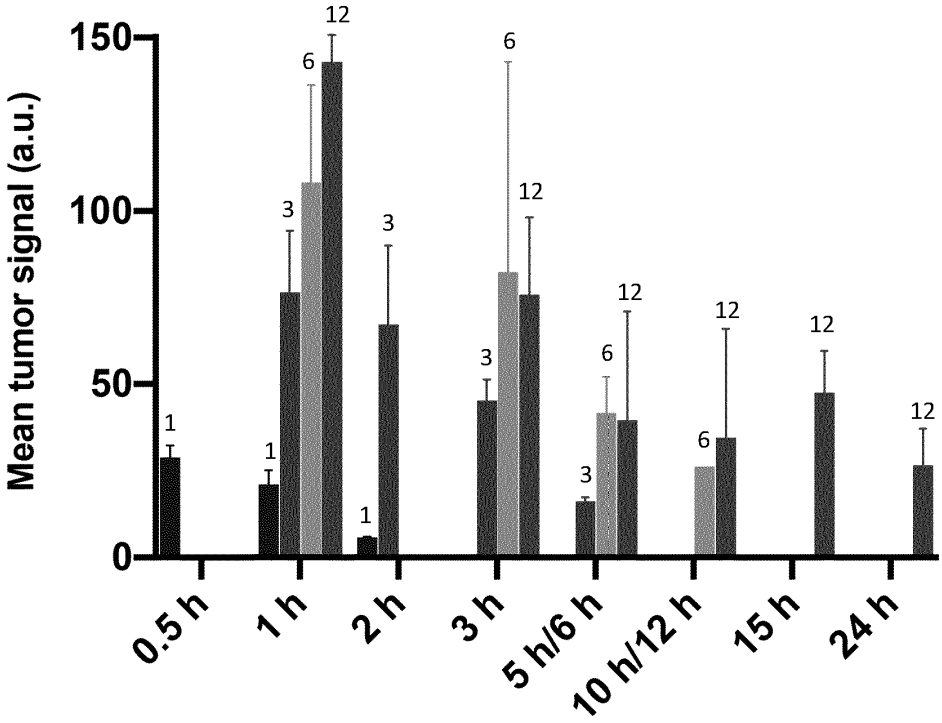

Mean tumor signal (a.u.)
150
100
50
0
0.5 h
1 h
2 h
3 h
5 h/6 h
10 h/12 h
15 h
24 h
1
3
6
12

Fig. 10

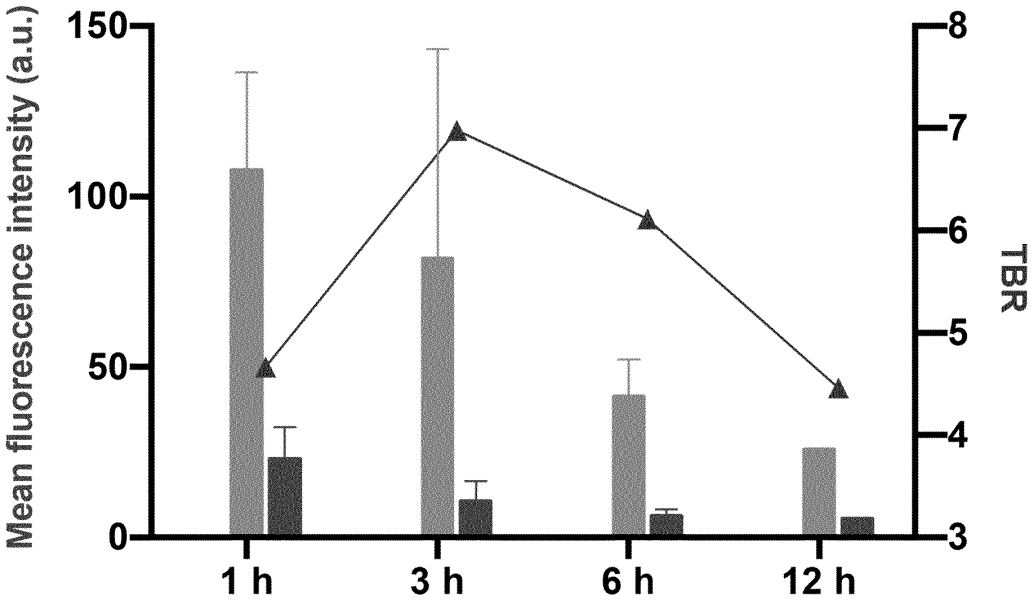

Mean fluorescence intensity (a.u.)
150
100
50
0
TBR
8
7
6
5
4
3
1 h
3 h
6 h
12 h

Fig. 11

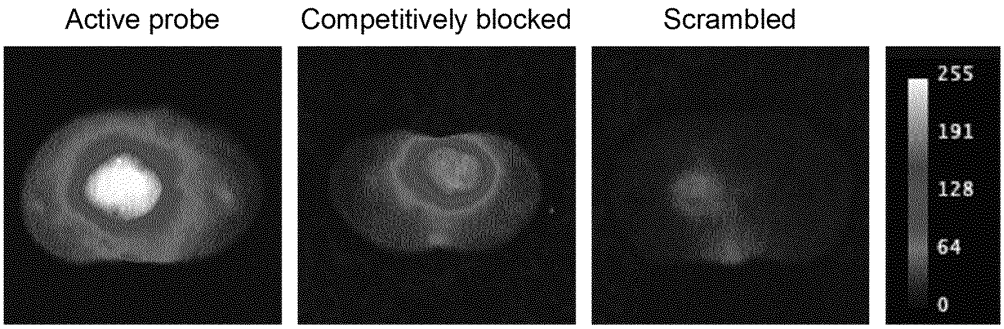

Active probe
Competitively blocked
Scrambled
255
191
128
64
0

Fig. 12

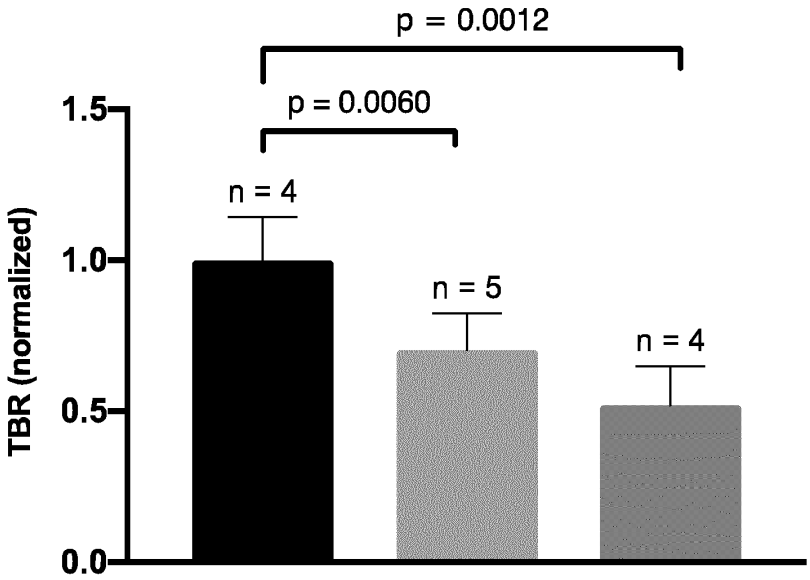

p = 0.0012
p = 0.0060
1.5
1.0
0.5
0.0
TBR (normalized)
n = 4
n = 5
n = 4

Fig. 13

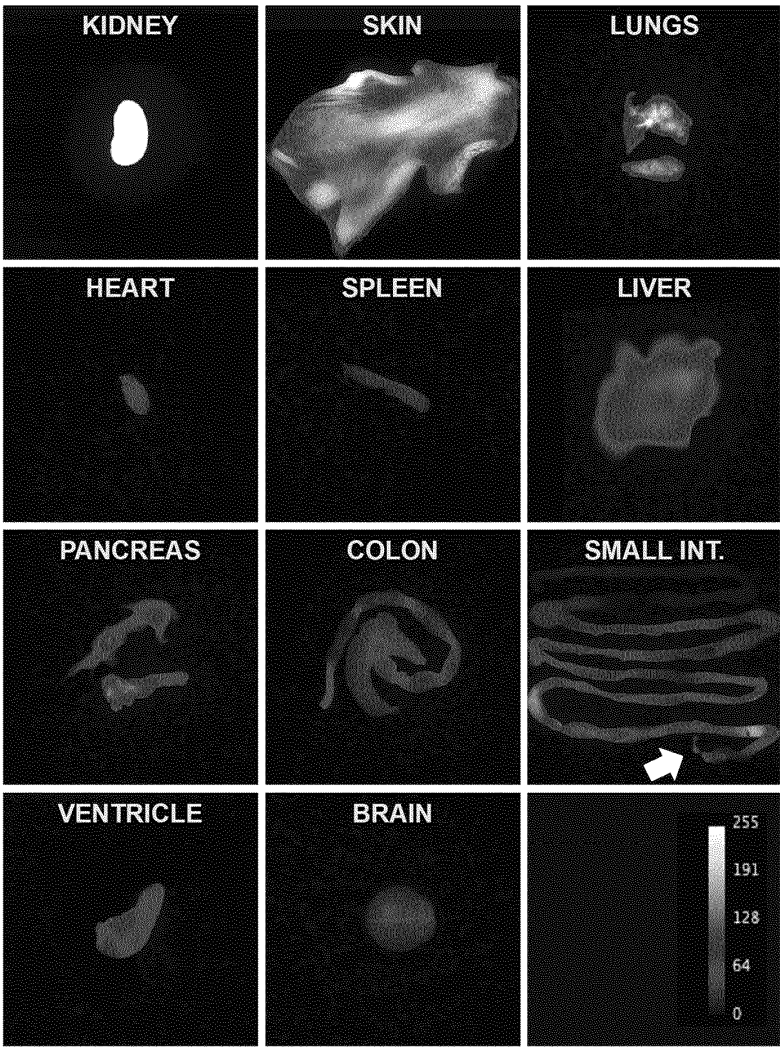

KIDNEY
SKIN
LUNGS
HEART
SPLEEN
LIVER
PANCREAS
COLON
SMALL INT.
VENTRICLE
BRAIN
255
191
128
64
0

Fig. 14

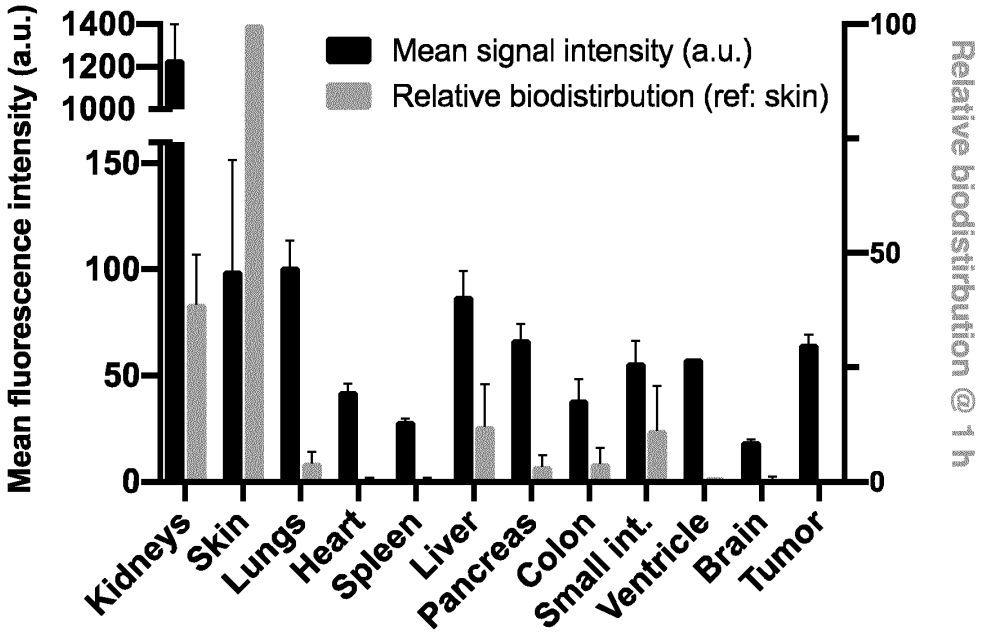

Mean fluorescence intensity (a.u.)
1400
1200
1000
150
100
50
0
Mean signal intensity (a.u.)
Relative biodistirbution (ref: skin)
100
50
0
Relative biodistribution @ 1 h
Kidneys
Skin
Lungs
Heart
Spleen
Liver
Pancreas
Colon
Small int.
Ventricle
Brain
Tumor

Fig. 15

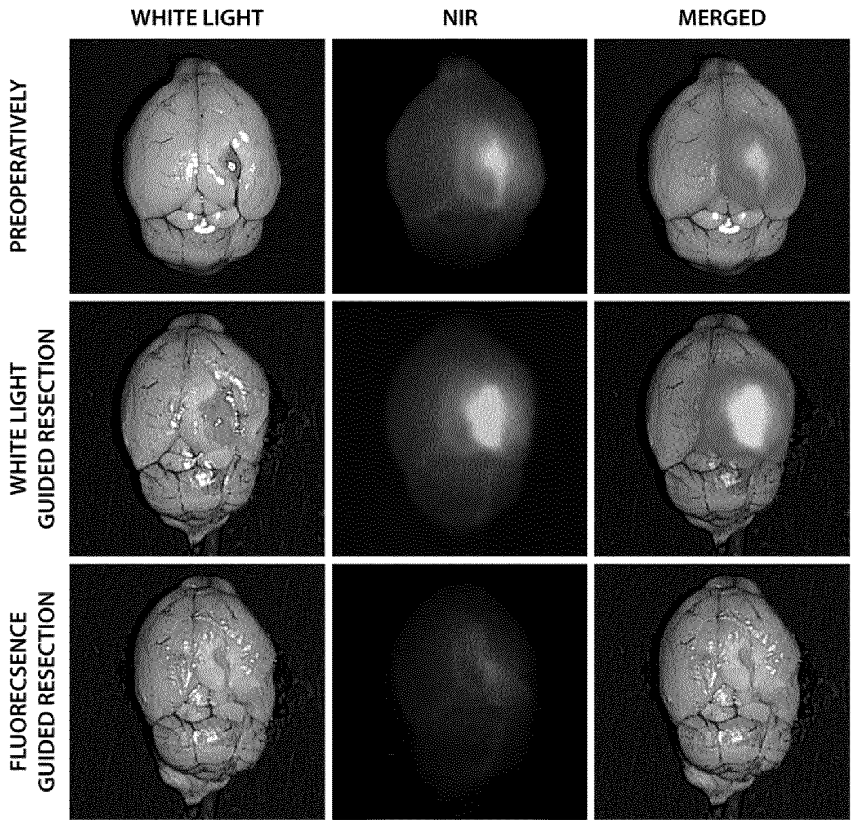

WHITE LIGHT
NIR
MERGED
PREOPERATIVELY
WHITE LIGHT GUIDED RESECTION
FLUORECSENCE GUIDED RESECTION

Fig. 16

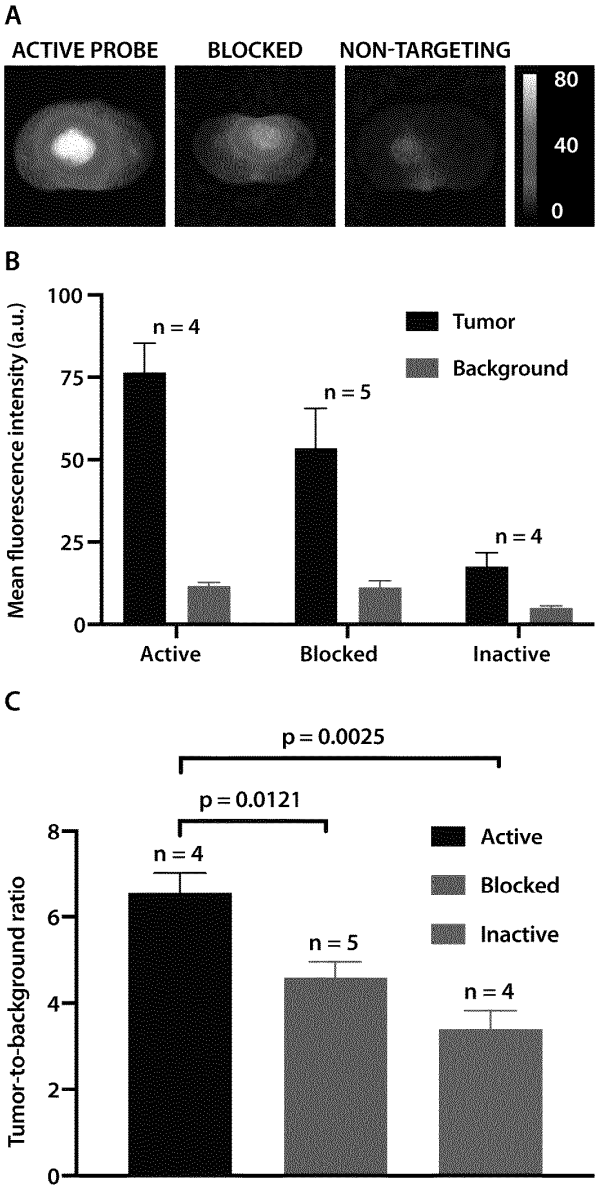
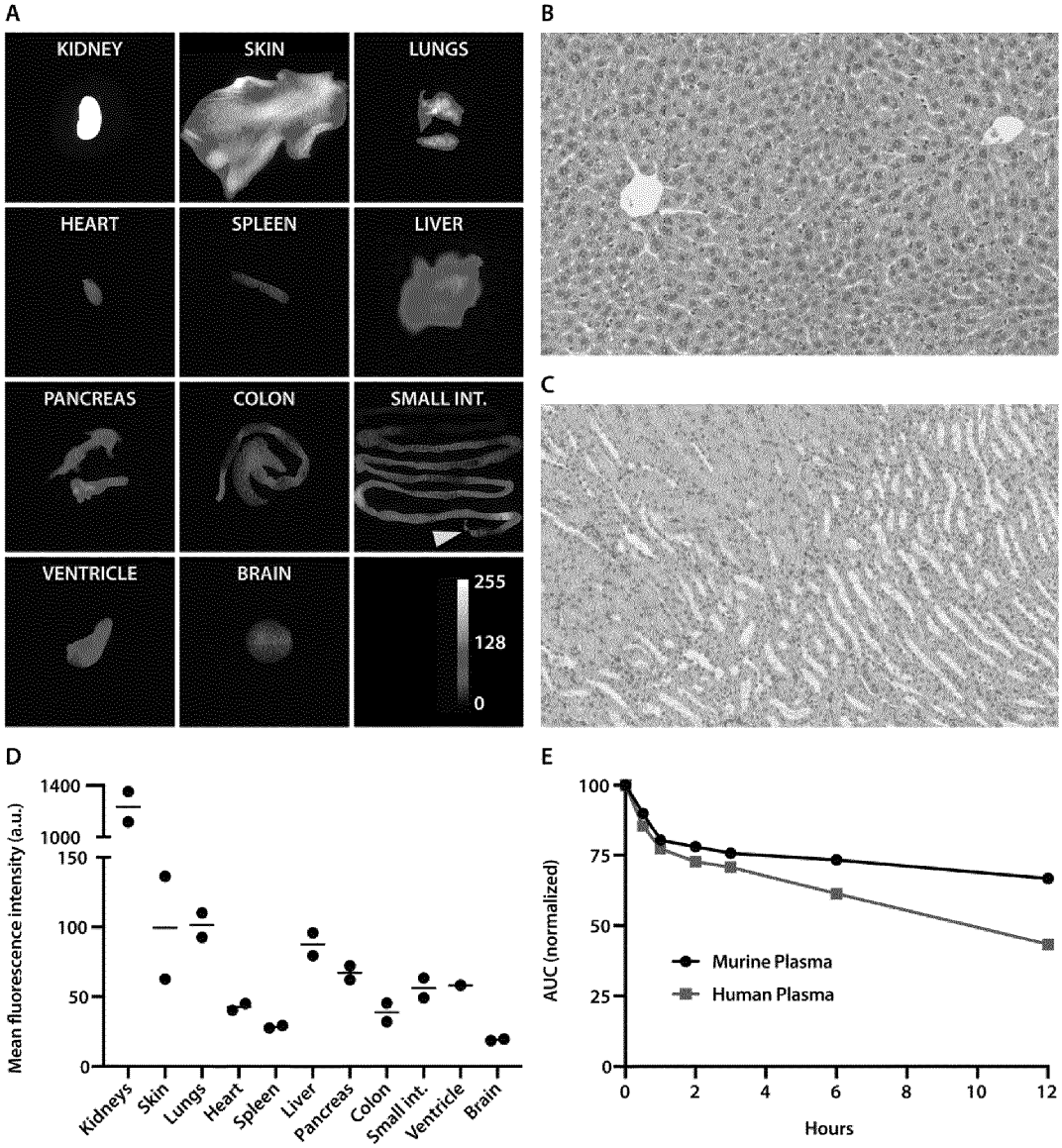

A
ACTIVE PROBE
BLOCKED
NON-TARGETING
80
40
0
B
Mean fluorescence intensity (a.u.)
100
75
50
25
0
n = 4
n = 5
n = 4
Tumor
Background
Active
Blocked
Inactive
C
p = 0.0025
p = 0.0121
Tumor-to-background ratio
8
6
4
2
0
n = 4
n = 5
n = 4
Active
Blocked
Inactive

Fig. 17


A
KIDNEY
SKIN
LUNGS
HEART
SPLEEN
LIVER
PANCREAS
COLON
SMALL INT.
VENTRICLE
BRAIN
255
128
0
B
C
D
Mean fluorescence intensity (a.u.)
1400
1000
150
100
50
0
Kidneys
Skin
Lungs
Heart
Spleen
Liver
Pancreas
Colon
Small int.
Ventricle
Brain
E
AUC (normalized)
100
75
50
25
0
0
2
4
6
8
10
12
Hours
Murine Plasma
Human Plasma