Errata: High-sensitivity detection of breast tumors in vivo by use of a pH-sensitive near-infrared fluorescence probe

Julia Eva Mathejczyk
Jutta Pauli
Christian Dullin
Ute Resch-Genger
Frauke Alves
Joanna Napp
Errata: High-sensitivity detection of breast tumors in vivo by use of a pH-sensitive near-infrared fluorescence probe

Julia Eva Mathejczyk,a Jutta Pauli,b Christian Dullin,c Ute Resch-Genger,b Frauke Alves,a,d and Joanna Nappa,c
aMax-Planck-Institute for Experimental Medicine, Department of Molecular Biology of Neuronal Signals, 37075 Göttingen, Germany
bBAM Federal Institute for Materials Research and Testing, 12489 Berlin, Germany
cUniversity Medicine Göttingen, Department of Diagnostic Radiology, 37075 Göttingen, Germany
dUniversity Medicine Göttingen, Department of Hematology and Oncology, 37075 Göttingen, Germany

This article [J. Biomed. Opt. 17, 076028 (2012)] was originally published online on 27 July 2012 with Figures 1 and 3 reversed. The corrected figures are reprinted below.

This article was corrected online on 6 August 2013.

Fig. 1 Fluorescence emission spectra of probes at different pH. Representative uncorrected fluorescence emission spectra (n = 3) of pH-Her (a) and Alexa-Her (b) measured in PBS at pH of 7.5 (black curve) and of 5.5 (red dashed curve) shown as examples for conjugates with a DP ratio of 1.6 (n = 3); excitation was at λex 635 nm.

Fig. 3 Fluorescence microscopy demonstrates internalization-dependent activation of pH-Her. Breast cancer cells grown on culture slides were incubated for 8 h with pH-Her or Alexa-Her. On the left panel, counterstain of cell nuclei with Hoechst 33342, in the middle, probe-derived signals, and on the right panel, merged images of the cell nuclei (blue) and the probe (red) are illustrated. (a), When incubated with KPL-4 cells at 37°C, pH-Her shows fluorescence only after receptor-mediated internalization (green arrow). (b), At 4°C, no signals from the pH-sensitive probe presumably bound to the cell membrane can be detected. (c), Alexa-Her shows fluorescence from the internalized probe (green arrow) and also membrane-derived fluorescence can be observed after 8 h of incubation at 37°C (c) and 4°C (d) (orange arrow, no internalization). Representative images of three independently performed experiments are presented. Bars represent 50 μm.