Journal of Biomedical Optics

SPIEDigitalLibrary.org/jbo

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

SPIE

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 Napp[a,c]
[a]Max-Planck-Institute for Experimental Medicine, Department of Molecular Biology of Neuronal Signals, 37075 Göttingen, Germany
[b]BAM Federal Institute for Materials Research and Testing, 12489 Berlin, Germany
[c]University Medicine Göttingen, Department of Diagnostic Radiology, 37075 Göttingen, Germany
[d]University Medicine Göttingen, Department of Hematology and Oncology, 37075 Göttingen, Germany

[DOI: 10.1117/1.JBO.18.8.089801]

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.

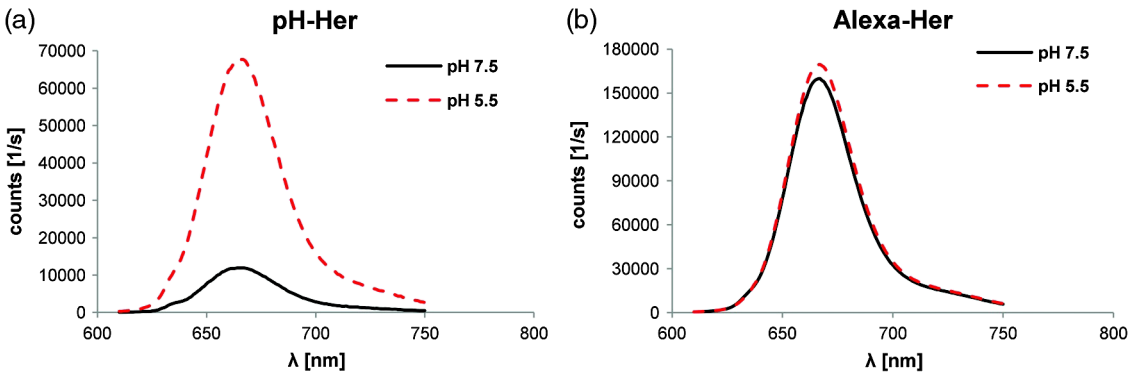

Fig. 1 Fluorescence emission spectra of probes at different pH. Representative uncorrected fluorescence emission spectra ($n = 3$) of pH-Her (a) and Alexa-Her (b) measured in PBS at pH of 7.5 (black curve) and of 5.5 (red dashed curve) shown as examples for conjugates with a DP ratio of 1.6 ($n = 3$);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

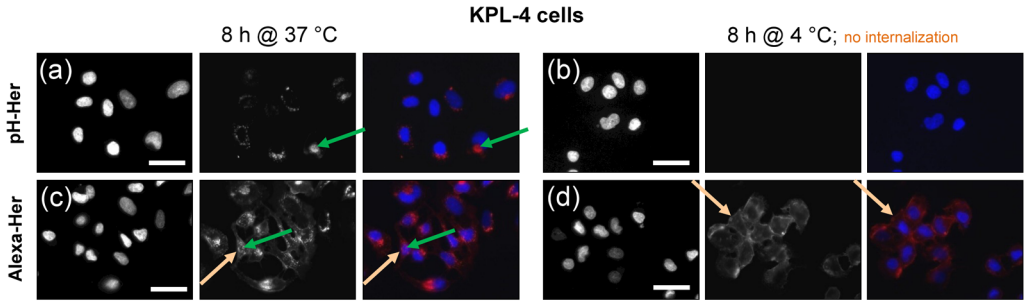

Fig. 3 Fluorescence microscopy demonstrates internalization-dependent activation of pH-Her. Breast cancer cells grown on culture slides were incubated for 8 h with pH-Her or Alexa-Her. On the left panel, counterstain of cell nuclei with Hoechst 33342, in the middle, probe-derived signals, and on the 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.