

Label-free photoacoustic microscopy for *in-vivo* tendon imaging using fiber-based pulse laser

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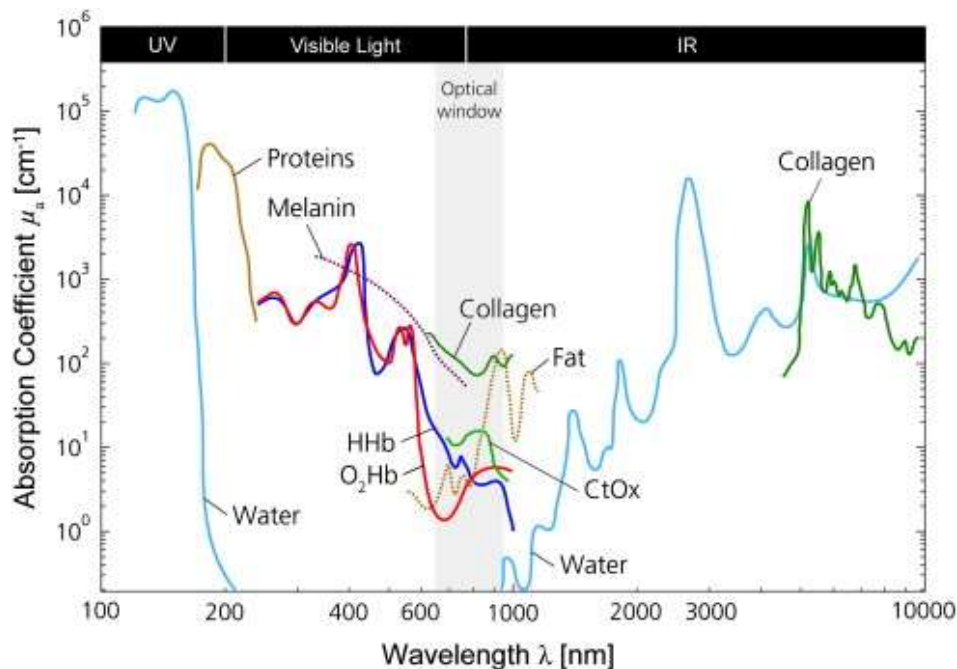
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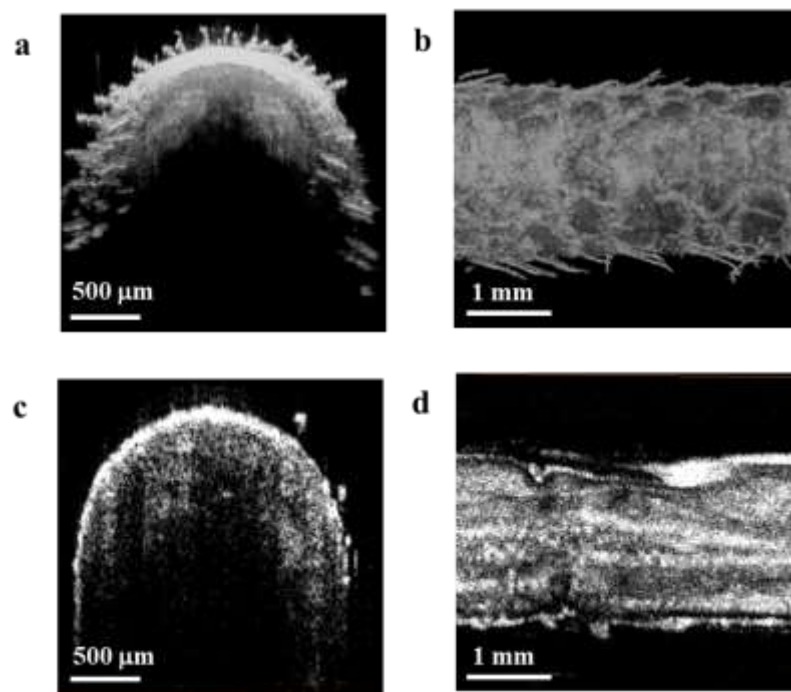
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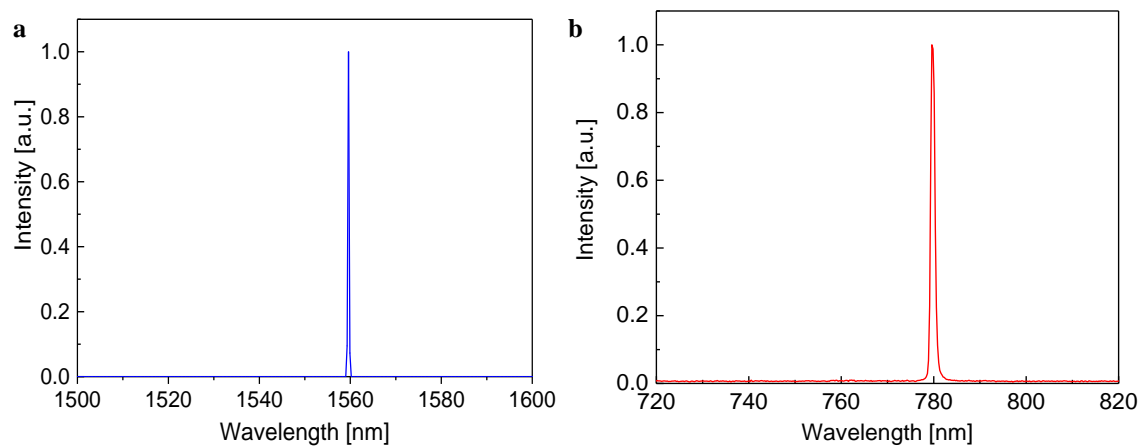
Supplementary Figures



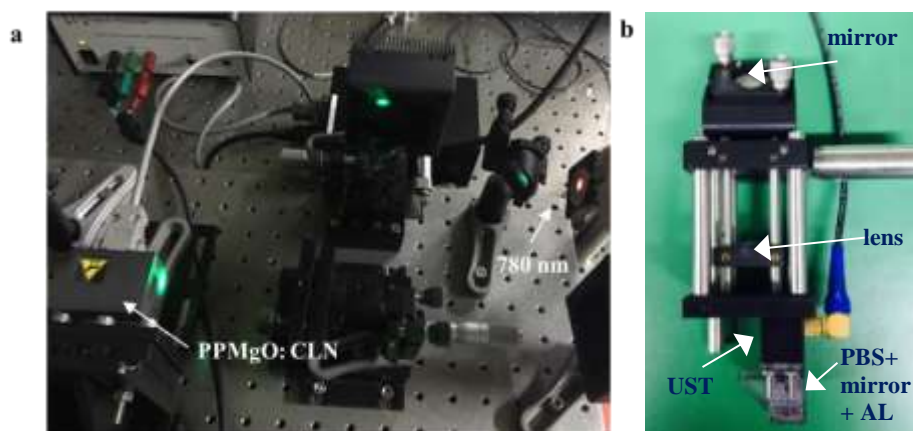
Supplementary Figure S1 | Absorption spectra (natural logarithm base!) for different chromophores present in human tissue. Shown are the spectra for O₂Hb, HHb, proteins, water, collagen, fat and cytochrome oxidase (CtO_x) in the region from 100 nm to 10,000 nm. The spectra are given with respect to the specific concentration in mM. (Reference 34)



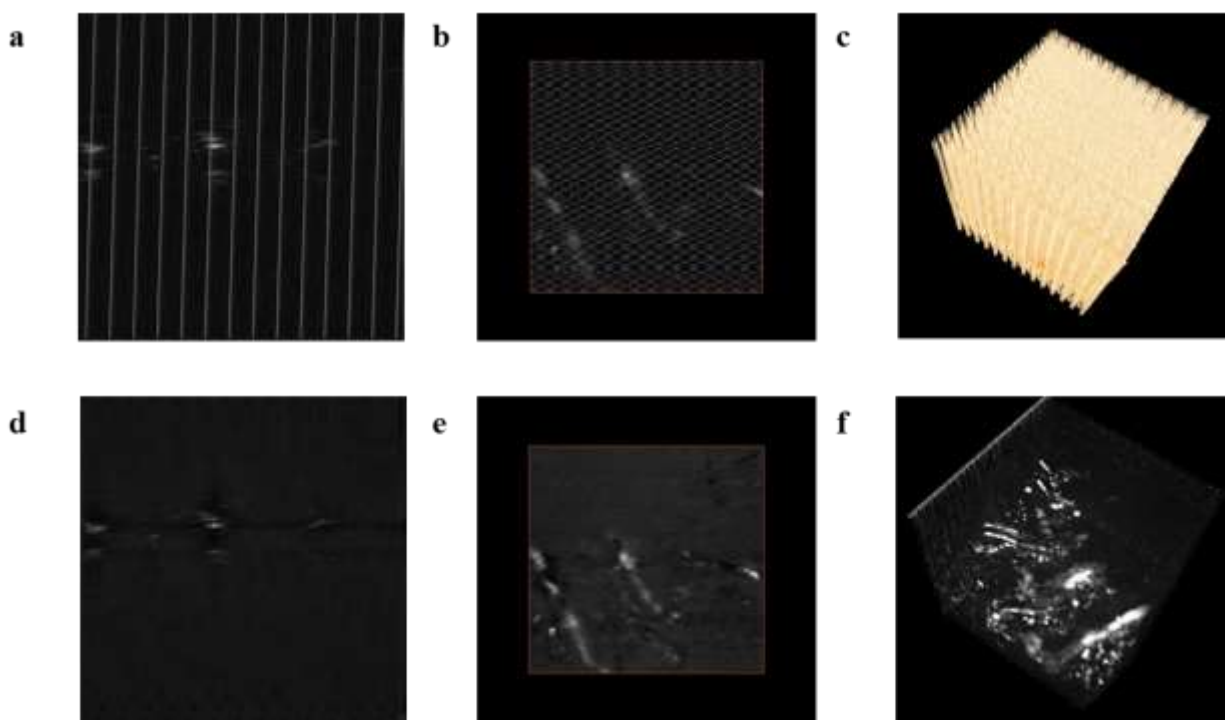
Supplementary Figure S2 | three-dimensional optical coherence tomography image of mouse tail (a) *in-vivo* depth-resolved (b) *en face* (c) *ex-vivo* depth-resolved (d) *en-face*



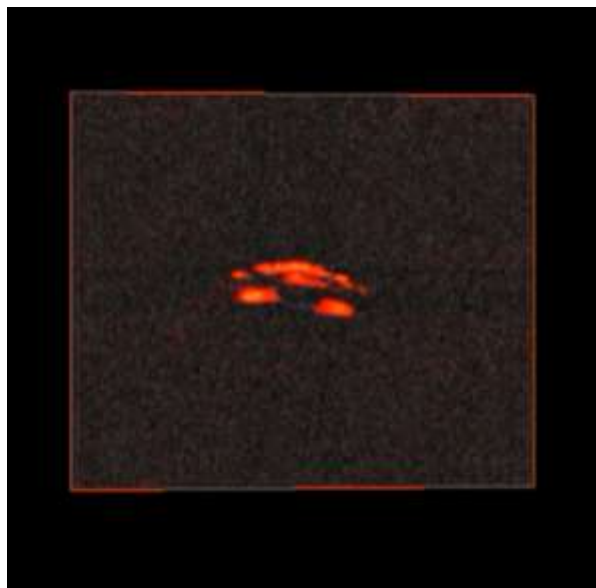
Supplementary Figure S3 | (a) Optical spectrum of output pulse with maximum peak power of 450 kW at PRR of 25 kHz (b) Optical spectrum of output pulse after second harmonic generation



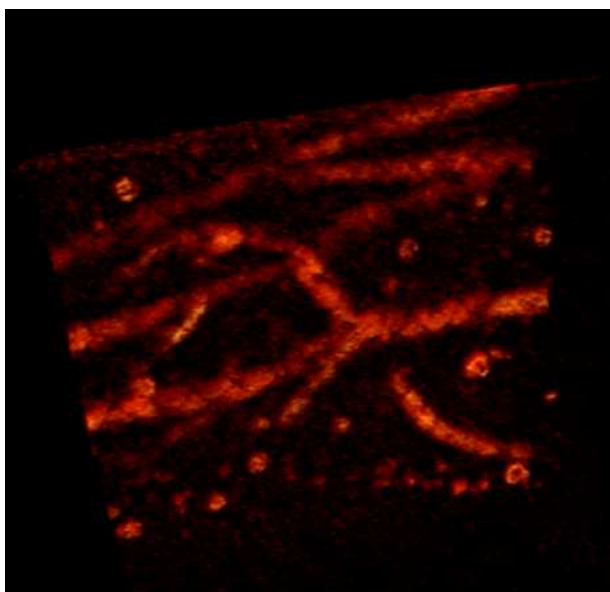
Supplementary Figure S4 | Photography of (a) second harmonic generation module and (b) sample arm. UST: ultrasound transducer ; PBS : polarization beam splitter; AL: acoustic lens ; red arrow : adjusting range of lens



Supplementary Figure S5 | PAM images before quasi-periodic noise removing (a) depth-resolved (b) enface (c) 3D rendering. PAM images after quasi-periodic noise removing (d) depth-resolved (e) enface (f) 3D rendering.



Supplementary Video S1 | *In-vivo* three-dimensional tendon imaging movie of the mouse tail. The movie is processed by commercial software, Arima.



Supplementary Video S2 | *In-vivo* three-dimensional tendon imaging movie of the mouse paw. The movie is processed by commercial software, Arima.