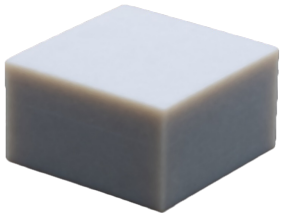
OptiBlox

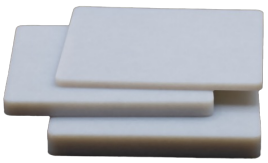
Customized Tissue Equivalent Optical Phantoms

by QUEL IMAGING

Q-T



50 x 50x 20mm
Standard OptiBlox®



50 x 50 x 3, 4, 5mm
Standard OptiBlox®

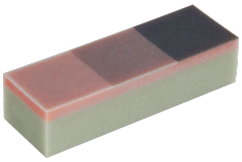
- Traditional rigid homogeneous phantoms with tissue-mimicking absorption and scattering
- Standard and customizable optical properties and sizes

Standard Q-T OptiBlox® sizes:
50 mm x 50 mm x 3, 4, 5, or 20 mm thickness
75 x 75 x 20 mm

Q-X



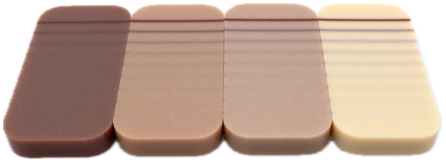
Colon



Multi-layered skin



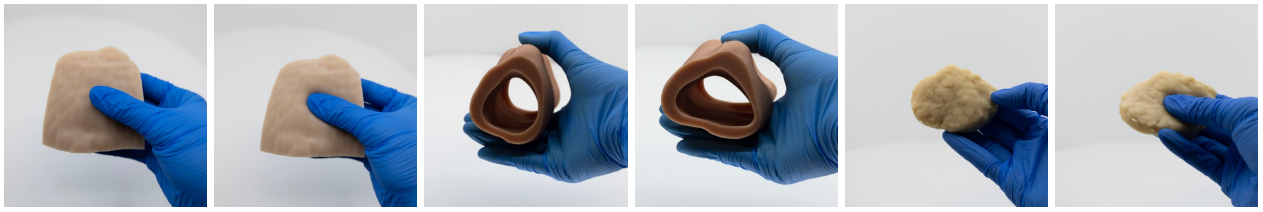
Prostate



Blood channels at varying depths

- State-of-the-art 3D-printed rigid heterogenous phantoms
- Multi-layer/multi-component/heterogenous optical properties customizability
- Multispectral tuning available (VIS/NIR)
- Minimum layer thickness: ~200 µm
- Minimum phantom thickness: 1 mm
- Maximum phantom size: 10 cm x 10 cm x 5 cm

Q-S

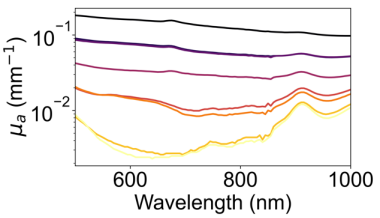


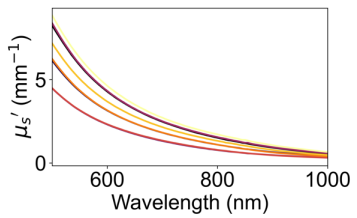
Lung **Colon** **Breast Lumpectomy**

- Homogeneous soft tissue phantoms with customizable mechanical properties
- Multispectral tuning available (VIS/NIR/SWIR)
- Simple or anatomical shapes

Optical Property Characterization

- μ_a and μ_s' determined by Inverse Adding Doubling algorithm from Total Transmittance and Total Reflectance measurements
- Transmittance and reflectance measured on commercial dual beam spectrophotometer with an integrating sphere
- Samples are co-manufactured alongside custom geometry for optical property measurements
- Standard reporting range: 450 – 950 nm
- Extended reporting range: 450 – 1500 nm





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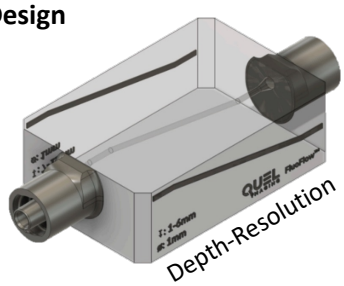
FluoFlow Dynamic Flow Phantoms by QUEL IMAGING

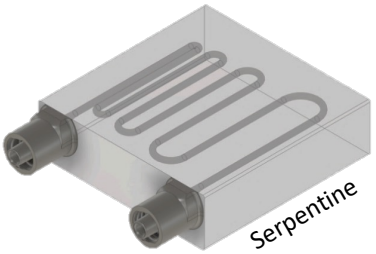
Need a flow channel for your fluorophore, contrast agent, or liquid?

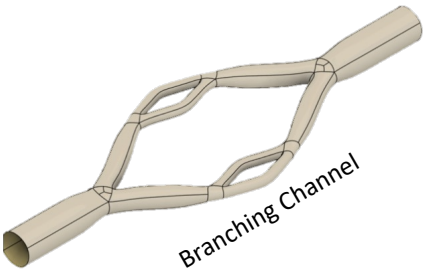
- FluoFlow® phantoms incorporate flow channels embedded in our proprietary tissue-equivalent material formulations
- Adaptors are incorporated into the phantom for easy connections with a pumping system
- Ideal for probe development and testing dynamic image analysis algorithms
- BYOF: Bring your own fluorophore, contrast agent, or liquid!

Example FluoFlow® Designs

Design

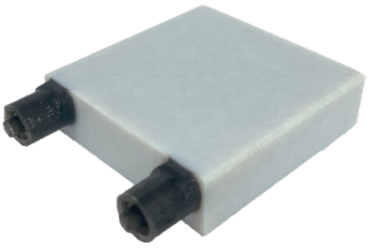






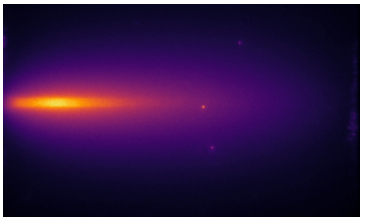
Phantom

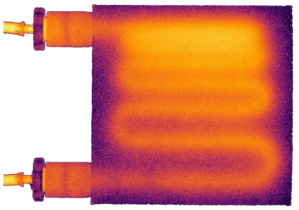


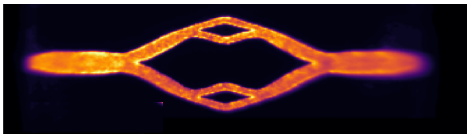




Fluorescence Image







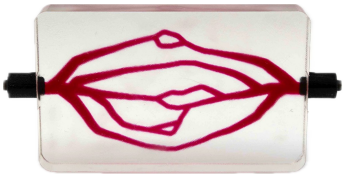
Customizable to your needs!

- Customizable dimensions, flow channel geometry (depth, diameter, etc.)
- Tuned optical properties (μ_a and μ_s') between 450 – 1500 nm with optical characterization

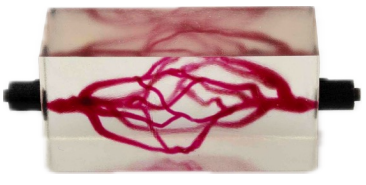
Schedule a free consultation:

Let's chat!

Branching Network FluoFlow® Phantoms



2D Branching Network



3D Branching Network

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shop.QUELimaging.com