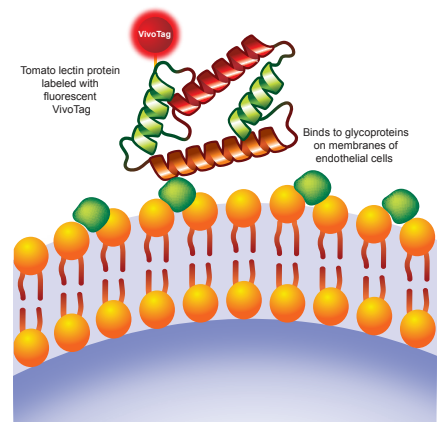


# THE RED STANDARD FOR VASCULAR LABELING

## TLectinSense™ 680 Targeted Fluorescent Pre-clinical Imaging Agent

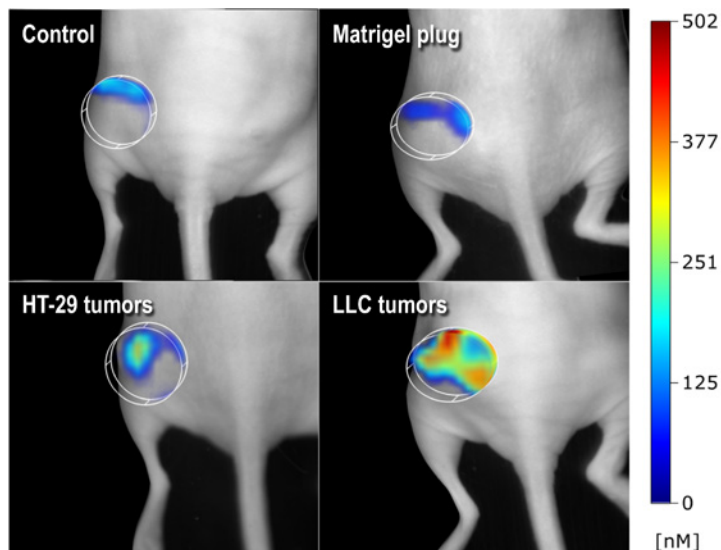
The protein Tomato (*L. esculentum*) lectin is widely used for vascular labeling, because the protein has high binding affinity for glycoprotein N-acetylglucosamines on the surface of vascular endothelial cells. The TLectinSense agent is a near-infrared fluorescent imaging probe designed and optimized for use in living animals. One of the gold standard methods for vascular mapping *ex vivo*, is now enabled for use *in vivo*.

- **Highly sensitive** to endothelial cell glycoproteins expression and ideal for labeling of tumor vascularization.
- **Employs a gold standard** for vascular labeling, Tomato lectin.
- Enables the **quantitation of vascular burden** across different tumor cell lines.
- **Broad imaging window from 6-24 hours.**
- High correlation between signal when used *in vivo* and *in vitro*.



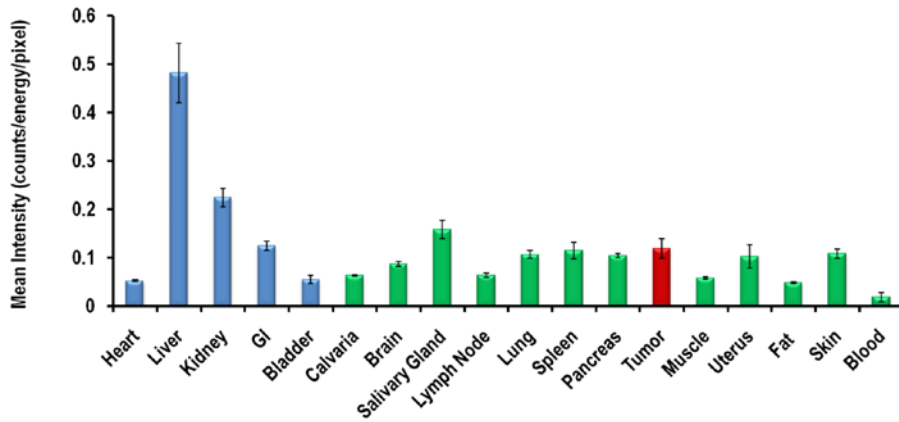
TLectinSense agent mechanism of action

## Differentiate Vascular Burden Across Tumor Models



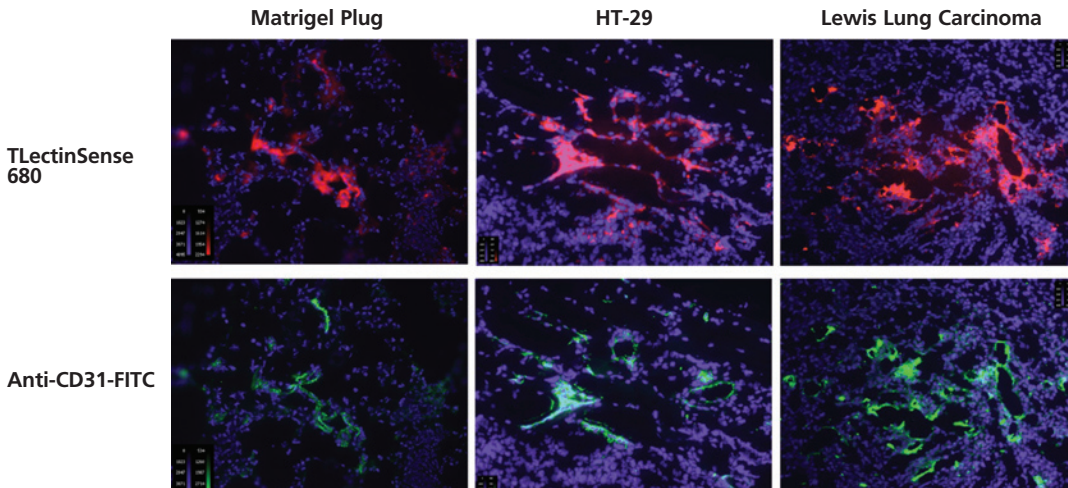
Nu/Nu female mice were implanted with either HT-29 or LLC tumor cell lines. Additional mice were injected with matrigel containing bFGF/VEGF/heparin. All groups were injected i.v. with 2 nmoles of TLectinSense agent. Shown tumor imaging region (only) at 6 hours. Vascular signal of normal adjacent tissues is excluded for clarity. Based on total fluorescence, the tumor xenografts show different apparent vascular burdens. Matrigel plug sections show very low lectin signal, as expected.

## Biodistribution



TLectinSense agent fluorescence distributed among several organs reflecting labeling of vascularity. Excellent correlation between in vivo and ex vivo biodistribution. Not recommended for increased tumor-to-background ratio (e.g. tumor definition), because it detects all vasculature.

## Colocalization with T lectin FITC



Based on total fluorescence, tumor xenograft tissues show differences in vascular burden, with in vivo TLectinSense binding in agreement with anti-CD31 (performed *ex vivo*). Matrigel plug sections show very low lectin signal, as expected.



The TLectinSense agent is optimized for use on PerkinElmer *in vivo* imaging Systems.

Learn more at [www.perkinelmer.com/invivo](http://www.perkinelmer.com/invivo)

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