

# Methods And Reagents For Live Biopsy

Tech ID: 24741 / UC Case 2015-071-0

## INVENTION NOVELTY

This invention identifies a set of antibodies that allow direct imaging of immune cells in a tumor biospecimen.

## VALUE PROPOSITION

Current companion diagnostics for cancer immunotherapies are based on specific biomarkers that are related to patient outcome in a certain percentage of the population, but do not allow for observation of the immune cells in vivo.

The technology here described would allow direct visualization of the behavioral response of immune cells to immunotherapy in live patient tissue samples.

This novel invention provides the following advantages:

- Live visualization of a patient’s immune cells **direct response** to the immunotherapy
- Visualization **of patient specific** response, prior to drug administration
- **Real-time** guide for personalized combination therapy
- Method to **screen** for novel immunotherapeutic molecules

## TECHNOLOGY DESCRIPTION

This novel technology identifies a set of antibodies for immune cell visualization, that would allow to determine the best combination immunotherapy for personalized cancer patient treatment.

Unlike other antibodies, they do not block ligand binding or down regulate the receptor they bind to, and therefor do not interfere with the activation/inactivation of the immune cells. This allows for a reliable method to detect the behavior of immune cells in response to immunotherapy, in a similar fashion to what would occur in the patient.

## APPLICATION

- Companion diagnostics for cancer immunotherapy
- Method to identify optimal combination therapy for personalized treatment
- Novel immunotherapeutic drug candidate screening method

## LOOKING FOR PARTNERS

### CONTACT

Heather Pittman  
[heather.pittman@ucsf.edu](mailto:heather.pittman@ucsf.edu)  
tel: [415-476-2203](tel:415-476-2203).



### OTHER INFORMATION

#### KEYWORDS

immunotherapy, diagnostic, antibodies, live biopsy

#### CATEGORIZED AS

- ▶ **Imaging**
- ▶ Molecular
- ▶ **Materials & Chemicals**
- ▶ Biological
- ▶ **Medical**
- ▶ Diagnostics
- ▶ Disease: Cancer
- ▶ Research Tools
- ▶ Screening
- ▶ **Research Tools**
- ▶ Antibodies
- ▶ Screening Assays

#### RELATED CASES

2015-071-0

Looking for partners to commercialize this technology as reagents to develop a companion diagnostics for immunotherapy and/or as a drug candidate screening method

STAGE OF DEVELOPMENT

Preclinical. Validated in patient biopsies.

RELATED MATERIALS

DATA AVAILABILITY

Under NDA/CDA

ADDRESS

UCSF

Innovation Ventures

600 16th St, Genentech Hall, S-272,  
San Francisco,CA 94158

CONTACT

Tel:

innovation@ucsf.edu

https://innovation.ucsf.edu

Fax:

CONNECT

 Follow  Connect

© 2015, The Regents of the University of California

[Terms of use](#) [Privacy Notice](#)