Manipulation Of Internalization Property Of Cell Surface Molecules Using A Guide-Effector Bispecific Design

Tech ID: 34518 / UC Case 2017-050-0

VALUE PROPOSITION

For many therapeutics across different disease areas there is a need to improve the internalization of the therapeutic by the targeted cells.

TECHNOLOGY DESCRIPTION

UCSF investigators have engineered bispecific antibodies that are capable of co-engaging a pair of antigens, termed “guide antigen” and “effector antigen,” that are expressed on the surface of the same cell. When being co-engaged by the engineered antibodies, the guide antigen can influence cell surface dynamics and/or signaling function of the effector antigen. The efficacy of such engineered bispecific antibodies has been demonstrated *in vitro* and *in vivo* in relevant animal models in the case of pancreatic cancer.

PATENT STATUS

Country	Type	Number	Dated	Case
Japan	Issued Patent	7695698	06/11/2025	2017-050
European Patent Office	Published Application	3911682	11/24/2021	2017-050
China	Published Application	CN 113614111 A	11/05/2021	2017-050

Additional Patents Pending

CONTACT

Kristin A. Agopian

kristin.agopian@ucsf.edu

tel: 415-340-2619.



OTHER INFORMATION

KEYWORDS

immunology, antibody, bispecific, oncology

CATEGORIZED AS

- Biotechnology
  - Health
- Medical
  - Disease: Cancer
  - New Chemical Entities, Drug Leads
  - Therapeutics

RELATED CASES

2017-050-0

© 2026, The Regents of the University of California