

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

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## 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

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## OTHER INFORMATION

### KEYWORDS

immunology, antibody,  
 bispecific, oncology

### CATEGORIZED AS

- ▶ [Biotechnology](#)
- ▶ [Health](#)
- ▶ [Medical](#)
- ▶ [Disease: Cancer](#)
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