The tumor-targeted CD40 agonist CEA-CD40 promotes T cell priming via a dual mode of action by increasing antigen delivery to dendritic cells and enhancing their activation.

Authors
Eva Sum, Moritz Rapp, Harald Dürr, Alekhyia Mazumdar, Pedro Romero, Christine Trumpfheiler, Pablo Umaña

Correspondence
christine.trumpfheiler@roche.com

In Brief
Proposed dual mode of action of the tumor-targeted CD40 agonist CEA-CD40 for enhancement of tumor-specific T cell priming: 1) Crosslinking of CEA-CD40 by CEA+ tumor cells induces dendritic cell (DC) maturation via CD40 activation. 2) Simultaneous binding of CEA-CD40 to DCs and tumor-derived CEA+ extracellular vesicles (EVs) increases EV delivery to DCs, facilitating loading of DCs with tumor-derived major histocompatibility complex I (MHC)/peptide complexes.