



MACROPINOCYTOSIS-MEDIATED RECYCLABLE LYTACS AND METHODS OF USE THEREOF

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The Invention

UW-Madison researchers have developed a novel platform for macropinocytosis-mediated recyclable LYTACs, coined McR-TACs. This platform is capable of initiating macropinocytosis to drag proteins of interest (POIs) into lysosomes, after which the LYTAC is exocytosed for recycling. Specifically, McR-TACs were designed as polymer-drug conjugates where POI ligands were covalently attached to a polymer capable of triggering macropinocytosis. This polymer, synthesized through reversible addition-fragmentation chain transfer (RAFT) polymerization of zwitterionic tertiary amine oxides, has been demonstrated to interact with the hydrophilic head groups of phospholipids on cell membranes, thereby inducing internalization in a receptor-independent manner.

Tech Fields

- [Drug Discovery & Development : Drug production & design](#)

For current licensing status, please contact Rafael Diaz at rdiaz@warf.org or 608-960-9847