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Artificial Cells for Advanced Drug Delivery

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Summary: Targeted drug delivery across biological barriers using artificial cells

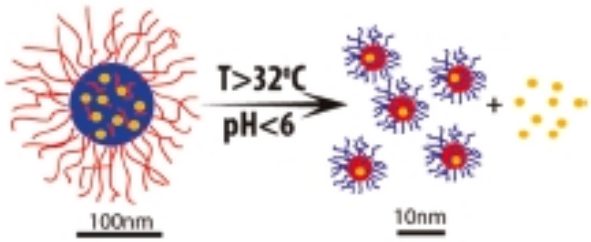
Description: The delivery of therapeutic and diagnostic compounds often involves crossing biological barriers to reach target sites. The intravenous delivery of these compounds involves conjugation or chemical bonding of the compound to a carrier molecule. This method is often costly and/or inefficient. This invention uses hybrid artificial cells based on the latest developments in nanotechnology for next-generation drug delivery and solves the problem of crossing a biological barrier to deliver the drugs. The artificial cells carry therapeutic agents in significant numbers without chemical modification of the individual drug molecules. This is particularly advantageous for drugs that have a narrow therapeutic index and challenging physical characteristics, such as anti-cancer drugs.

Main Advantages of this Invention

- Effective delivery of the drug through the biological barriers
- No need to chemically alter the drug
- Administered intravenously

Potential Areas of Application

- Drug therapeutics
- Drug development



Schematic representation of the duel responsive behavior of self-assembled nanocarriers

ID number: 9002

Intellectual Property Status: US utility patent pending (application #12/704,416)

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Opportunity: We are seeking an exclusive or non-exclusive licensee for marketing, manufacturing, and sale of this technology.

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