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(54) Title: LIPID NANOPARTICLES FOR DELIVERY OF THERAPEUTIC PAYLOADS TO CELLS

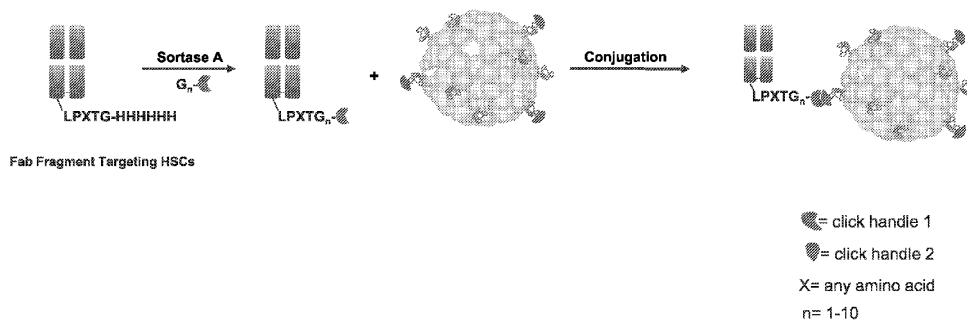


FIG. 1

(57) Abstract: The disclosure provides ionizable lipids for constructing lipid nanoparticles. The disclosure further provides conjugates comprising a targeting moiety and a lipid nanoparticle (LNP) encapsulating a therapeutic agent (e.g., payload) for delivery to immune cells, hematopoietic stem cells (HSCs), or liver cells. The conjugates can be delivered to cells ex vivo or formulated in a pharmaceutical composition to be directly administered to a subject in need thereof (e.g., via in vivo administration).

[Continued on next page]

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