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CEPTED MANUS

Synthesis of high functionality and quality mannose-grafted lipids to produce

macrophage-targeted liposomes

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Keywords: mannose; lipid; serine-glycine repeat spacer; macrophage; liposome

ABSTRACT

The mannose receptor, which is responsible for tumor invasion, proliferation, and

metastasis in the tumor microenvironment, is overexpressed in tumor-associated

macrophages. Mannose is commonly applied to PEGylated liposomes in

macrophage-targeted cancer therapy. To develop a high functionality and quality (HFQ)

lipid for macrophage-targeted liposomes, we designed a novel mannosylated lipid with

improved mannose receptor binding affinity using serine-glycine repeats (SG)_n. We

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