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(54) Title: A METHOD OF MODIFYING AN ORGANIC CYTOTOXIN FOR USE AS A PAYLOAD IN AN ANTIBODY-DRUG CONJUGATE AND MODIFIED ORGANIC CYTOTOXINS DERIVED THEREFROM

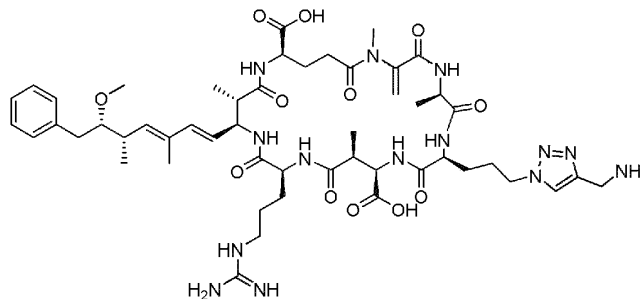


Fig. 2

(57) Abstract: This invention provides a method of modifying a cyanobacterial or fungal toxin for use as a payload in an antibody-drug conjugate, comprising the following steps: selecting a cyanobacterial or fungal toxin having a base structure known to be cytotoxic for a target cell after uptake by a transporter protein of the target cell, modifying the base structure with at least one structural modification, wherein the at least one structural modification comprises an organic inhibitory group or effector molecule reducing the uptake of the modified toxin by the transporter protein into the target cell in comparison to the base structure, and an organic coupling group configured for covalent conjugation of the modified toxin to an antibody. This invention further provides modified toxins derived from the method and uses thereof.

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