



PCT

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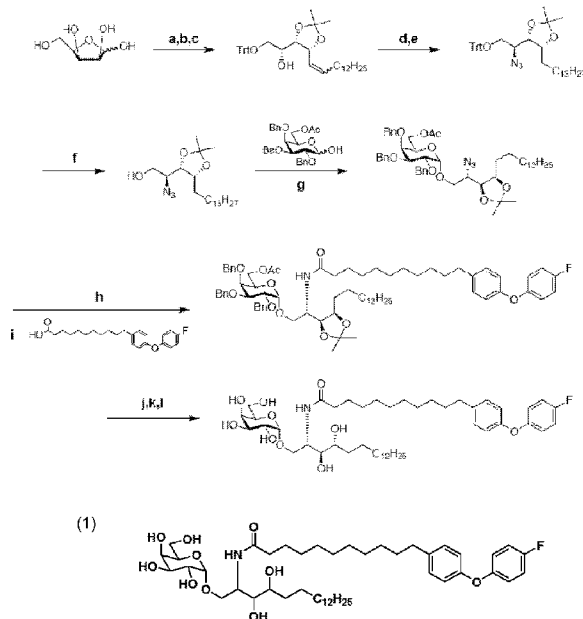
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Fig. 80



(57) Abstract: The present disclosure relates to synthetic alpha-galactosyl ceramide (α -GalCer) analogs, and their use as immunotherapies, adjuvants, and antiviral, antibacterial, and anticancer agents. In one aspect, a method of activating a cytokine response in a subject includes administering an effective amount of a compound to a subject, wherein the subject has an adaptive immune system that includes a population of cells, the population including at least one lymphocyte and at least one antigen-presenting cell, and wherein the compound is represented by the structure of formula 1; or a pharmaceutically acceptable salt thereof; forming a complex between the compound and the antigen-presenting cell, wherein the formation of the complex results in the activation of a receptor on the lymphocyte; and activating the lymphocyte to produce the cytokine response.



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