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(54) Title: COMPOSITIONS AND METHODS FOR PRODUCING REBAUDIOSIDE M

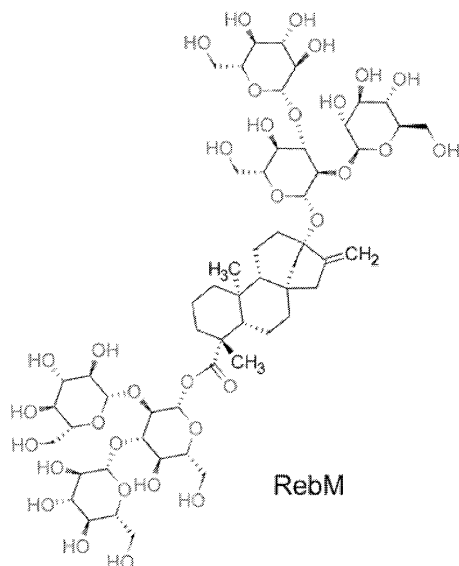


FIG. 1

(57) Abstract: The present disclosure provides enzymes and a method to use those enzymes to transfer a sugar moiety to a substrate steviol glycoside. The designed beta-1,3-glycosyltransferases can add beta-1,3 linked glucose monomers to steviol glycosides. Specifically, the designed beta-1,3-glycosyltransferases are used in a one-pot reaction with a beta-1,2-glycosyltransferase and sucrose synthase to convert stevioside and/or Reb A into Reb M.

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