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(54) Title: PREPARATIVE SCALE CONVERSION OF GONYAUTOXINS TO NEOSAXITOXIN

(57) Abstract: A method of preparing neosaxitoxin in quantities of a purity sufficient to allow the compound to be used as an active pharmaceutical ingredient (API) is described. The method includes the reductive desulfonation of an unresolved mixture of gonyautoxin I (GTX1) and gonyautoxin 4 (GTX4), by using a dithiol (such as DTT or DTBA) in a solution where the pH is in the range 7.4 to 7.6. The reaction product is purified using a silica-based weak cation exchange sorbent to separate the neosaxitoxin from the dithiol.

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