United States Patent [19]

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[54] **PROCESS FOR THE PREPARATION OF PTERIN DERIVATIVES**

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[52] **U.S. Cl.** **544/258**; 536/121

[58] **Field of Search** 536/121; 544/258

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[57] **ABSTRACT**

A process of preparing l-biopterin is disclosed which comprises the steps of:

Subjecting to selective Grignard reaction D-ribose having the hydroxyl groups in the 2- and 3-positions protected by an acetal group to give 6-deoxy-3,4-O-alkylidene allitol;

subjecting the 1- and 2-positions of said allitol to oxidative cleavage to form 5-deoxy-2,3-O-alkylidene-L-ribose followed by deacetalization to give 5-deoxy-L-ribose;

reacting 5-deoxy-L-ribose with a hydrazine compound to form a 5-deoxy-L-ribose hydrazone compound; and

subjecting said hydrazone compound to condensation reaction with an acid addition salt of 4-hydroxy-2,5,6-triaminopyrimidine followed by oxidation.

6 Claims, No Drawings