

[54] 1',2'-DIACYL-(6R,S)-5,6,7,8-TETRAHYDRO-L-BIOPTERIN AND PROCESS FOR PREPARING THE SAME

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[57] ABSTRACT

A novel compound, 1',2'-diacyl-(6R,S)-5,6,7,8-tetrahydro-L-biopterin which is prepared by catalytical hydrogenation of a 1',2'-diacyl-L-biopterin in a solvent in the presence of a catalyst. The 1',2'-diacyl-L-biopterin is prepared from a 1,1-dialkylsulfonyl-L-rhamnose through an acyl derivative of 5-deoxy-L-arabinose and a hydrazine derivative of tetrahydro-L-biopterin without isolating the intermediate products. The 1', 2'-diacyl-(6R,S)-5,6,7,8-tetrahydro-L-biopterin can be used for treatment of atypical phenylketonuria or dihydropterin-reductase deficiency* and can readily cross the blood brain barrier without neurotransmitter precursors.

6 Claims, 4 Drawing Figures