



Short and Stereoselective Synthesis of α -Methylene- β -hydroxy- γ -butyrolactone Diastereomers. Structures Revised by Theoretical Investigations

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SUMMARY. A short synthetic approach allowed the preparation, in two steps, of (3*S*,4*R*)- and (3*R*,4*R*)-2-methylene-3-hydroxy-4-(hydroxymethyl)- γ -butyrolactones from 2,3-*O*-(3-pentylidene)-*D*-glyceraldehyde, with overall yields of 32 % and 9 %, respectively. The structure of these γ -butyrolactones was revised by experimental and theoretical investigations.

KEY WORDS: Antitumoral agents, BLYP/6-31G* theoretical calculation, γ -butyrolactones.

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