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Title:	Chelation-controlled diastereoselective construction of N-aryl-, N-acyl/tosylhydrazono $\beta$ -substituted aspartate derivatives via Barbier-type reaction
Authors:	Aslam, N.A. (/jspui/browse?type=author&value=Aslam%2C+N.A.) Babu, S.A. (/jspui/browse?type=author&value=Babu%2C+S.A.) Sudha, A.J. (/jspui/browse?type=author&value=Sudha%2C+A.J.)
Keywords:	Amino acids Aspartic acid Allylation Imines
Issue Date:	2013
Publisher:	Elsevier
Citation:	Tetrahedron,69(32),pp. 6598-6611.
Abstract:	An entry into the stereoselective synthesis of several N-substituted- $\beta$ -vinyl aspartate and $\beta$ -alkyl aspartate derivatives having two contiguous stereocenters via the indium-mediated Barbier-type addition of alkyl 4-bromocrotonates or $\alpha$ -halo esters with N-aryl (including N-PMP) $\alpha$ -imino- and N-acyl/tosylhydrazono esters is reported. The formation of $\beta$ -alkyl aspartate derivatives with exclusively syn stereochemistry in alcohol media revealed the involvement of a chelation-controlled TS. The synthesis of functionalized 1,4-diols, cis piperidine-2,3-dicarboxylate derivative and $\beta$ -ethyl aspartic acid hydrochloride was performed using the N-substituted $\beta$ -vinyl aspartates obtained in this work. The stereochemistry of representative products was unambiguously established from the single crystal X-ray structure analyses.
Description:	Only IISERM authors are available in the record.
URI:	<a href="https://www.sciencedirect.com/science/article/pii/S0040402013008983">https://www.sciencedirect.com/science/article/pii/S0040402013008983</a> ( <a href="https://www.sciencedirect.com/science/article/pii/S0040402013008983">https://www.sciencedirect.com/science/article/pii/S0040402013008983</a> ) <a href="http://hdl.handle.net/123456789/2840">http://hdl.handle.net/123456789/2840</a> ( <a href="http://hdl.handle.net/123456789/2840">http://hdl.handle.net/123456789/2840</a> )
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