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(54) Title: STEREOSELECTIVE BIOCONVERSION OF ALIPHATIC DINITRILES INTO CYANO CARBOXYLIC ACIDS

(57) Abstract: The present invention is directed to a regio-and stereoselective bioconversion of selected aliphatic dinitriles into corresponding cyanocarboxylic acids. More particularly, the present invention provides methods for the conversion of 2-isobutyl-succinonitrile into (S)-3 cyano-5-methylhexanoic .acid, which is a useful intermediate in the synthesis of (S)-3(aminomethyl)-5-methylhexanoic acid (pregabalin). Pregabalin can be used for treating certain cerebral diseases, for example, in the treatment and prevention of seizure disorders, pain, and psychotic disorders.

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