



BIOTECH CONSORTIUM INDIA LIMITED

PROCESS FOR THE SYNTHESIS OF HIGHLY FUNCTIONALIZED RACEMIC AND NON-RACEMIC PIPERIDINES

TECHNOLOGY AVAILABLE FOR TRANSFER

TECHNOLOGY

The technology offers a single-pot two-step process for synthesis of highly functionalized piperidines in stereochemically pure forms. Synthesis of 2,6-disubstituted piperidines in diastereo as well as enantiopure forms involves simple precursors like substituted 1,3-dicarbonyl compounds and imines. The process involves a domino-imino-aldol-aza-Michael reaction sequences.

The process has been developed at the Chemistry Department of Indian Institute of Technology, Kanpur.

APPLICATIONS

- Synthesis of piperidine ring systems
- Synthesis of drugs with piperidine ring system

INTELLECTUAL PROPERTY

Patent Pending

COMPETITIVE ADVANTAGES

- The two steps are executed sequentially in a single pot operation
- Better chemical yield than current multistep processes
- Stereoselectivity of the final product easily controlled by varying reaction parameters.
- Avoids use of any hazardous or toxic material.
- No requirement of isolating intermediate products
- Requires fewer reagents

STATE OF DEVELOPMENT

- The technology is developed and validated till lab scale.

LICENSING OPPORTUNITY

BCIL is looking for a suitable company involved in production of pharmaceutical drugs.

CONTACT:

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