BIOTRANS
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TOPIC(s) : Biocatalytic cascade reactions / Reaction design

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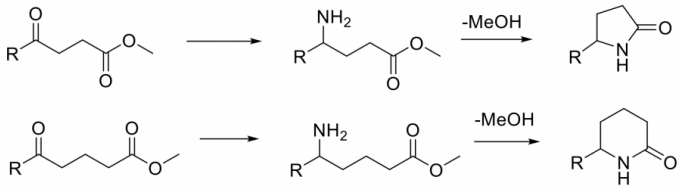
## PURPOSE OF THE ABSTRACT
Optically active nitrogen heterocycles are widely found across many living organisms and also play important roles in fine chemical and pharmaceutical industries. The production of a single enantiomers is usually non-sustainable due to the use of toxic solvents and transition metal catalysts. In nature, transaminases catalyse the conversion between carbonyl compounds and amines in a relatively high efficiency and mild conditions. Some approaches have been developed to allow cascade reactions of spontaneous cyclisation to form desired optically pure amine products.

## FIGURES



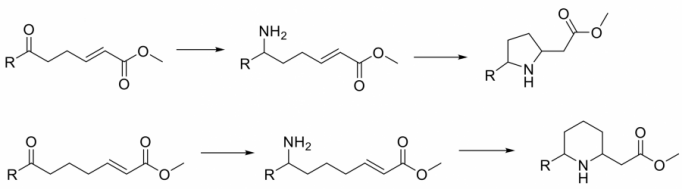



**FIGURE 1**
LACTAM FORMATION
SUBSTRATES

**FIGURE 2**
INTRAMOLECULAR MICHAEL ADDITION
SUBSTRATES


## KEYWORDS
TRANSAMINASE | BIOCATALYTIC CASCADE | SPONTANEOUS CYCLISATION | AMINE


## BIBLIOGRAPHY

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