

# ABSTRACTS

10<sup>TH</sup> CONGRESS AND  
INTERNATIONAL CONFERENCE OF  
INDONESIAN SOCIETY FOR MICROBIOLOGY  
(ICISMI)

## RECENT ADVANCE OF MICROBIOLOGY IN HEALTH, BIO-INDUSTRY, AGRICULTURE AND ENVIRONMENT

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Organization of  
Indonesia Society for Microbiology  
(ISM) Surabaya Branch



Institute of Tropical Disease  
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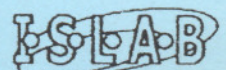


IUMS

International Union of  
Microbiological Societies



American Society for Microbiology



Indonesian Society for  
Lactic Acid Bacteria

## Natural Products Potential for Antigene Strategy

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### *Abstract*

In an effort to construct non-conventional bases to be used in triplex-based antigene DNA recognition strategies, many synthetic compounds have been designed and synthesized to bind the cytosine-guanine (CG) or adenine-thymine (AT) base pair. This specific DNA recognition is expected to revolutionize medicine and biotechnology in the future. On the other hand, natural medication has been more and more preferable to most people, while synthetic drugs are slowly becoming the second choice. Furthermore, Indonesia possesses a wide diversity of plants and microbes which are very potential as the source for natural compounds, predominantly in the form of secondary metabolites of the living organisms. Based on those facts, screening of natural compounds able to substitute the role of synthetic antigene agents should be interesting and promising to support research on Gene Therapy. This can be done using several approaches. Structural analysis should be valuable to do before starting other devices such as Calorimetry, Thermal DNA Denaturation Experiment and some other Spectroscopic Methods.

Key words: natural product-DNA interaction, DNA recognition.