

**ISOLASI, KARAKTERISASI DAN IDENTIFIKASI  
MOLEKULER BAKTERI PROBIOTIK ASAL MEKONIUM**  
*(Isolation, Characterization, Molecular Identification of Probiotic  
Bacteria From Meconium)*

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**Abstrak**

Bakteri probiotik merupakan kelompok bakteri yang memberikan dampak positif seperti meningkatkan kemampuan penyerapan beberapa nutrisi, menjaga pH usus sehingga dapat terlindungi dari mikroorganisme patogen, menjaga gangguan dalam penyerapan air, melancarkan pencernaan dengan memproduksi beberapa enzim pencernaan. Setiap spesies bakteri memiliki efek probiotik yang berbeda-beda sehingga diperlukan seleksi dan identifikasi untuk mendapatkan strain probiotik yang baik. Identifikasi bakteri probiotik dalam penelitian ini menggunakan metode identifikasi molekuler dengan gen penanda 16S rRNA. 6 isolat bakteri probiotik (DA1, DA3, DA4, DA7, DA8, DA10) diidentifikasi memiliki karakteristik yaitu memiliki bentuk cirkuler, tepi entire dan elevansi flat selanjutnya Uji Biokimia didapatkan katalase negative, tipe homofermentatif, pati negative, sitrat negative, motilitas positif dan gelatin negatif. Hasil uji antibakteri memiliki zona bening yaitu 7,1 mm. hasil sekuensing dengan bantuan program Basic Local Alignment Search Tool (BLAST) didapatkan Bakteri probiotik asal mekonium memiliki kemiripan 99,78% dengan *Basillus coagulans* NBRC.

**Kata Kunci : Probiotik, Molekuler, Sekuensing**

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***Abstract***

*Probiotic bacteria are a group of bacteria that have positive effects such as increasing the absorption ability of some nutrients, maintaining the intestinal pH so that it can be protected from pathogenic microorganisms, maintaining disturbances in water absorption, smoothing digestion by producing several digestive enzymes. Each bacterial species has different probiotic effects so selection and identification are needed to get a good strain of probiotics. The identification of probiotic bacteria in this study uses the molecular identification method with the 16S rRNA marker gene. 6 probiotic bacterial isolates (DA1, DA3, DA4, DA7, DA8, DA10) were identified as having the characteristics of a circular shape, the edge of the entire and flat elevation. negative. The antibacterial test results have a clear zone of 7.1 mm. The results of sequencing with the help of the Basic Local Alignment Search Tool (BLAST) program showed that probiotic bacteria from meconium had 99.78% similarity with *Basillus coagulans* NBRC.*

***Keywords: Probiotics, Molecular, Sequencing***