#### I. Deskripsi Sampel

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Asal sampel** | **Kode/ nomor sampel** | **Jenis Sampel** | **Jenis Analisis (\*)** |
| 1. | Dian Alfian N | **BAC 1.1 N** | isolat |  |

#### Ket. (\*):

* HPLC
* GC-FID
* GCMS
* Varioskan

#### II. Proses Identifikasi

* Bakteri

Identifikasi isolat Bakteri dilakukan dengan metoda protein analisis menggunakan MALDI TOF MS (*Matrix Asisted Laser Desorption/Ionization-Time Of Flight Mass Spectrometry*). Protein yang di analisis merupakan protein mitokondria dari sel sampel bakteri yang diidentifkasi. Proses pengambilan protein dari mitokondria ini menggunakan metoda *Formic Acid*. Dalam prsose identifikasi ini, e-Coli digunakan sebagai kontrol positif.

Pembentukan Kristal protein menggunakan matrix **α-cyano-4-hydroxy-cinnamic acid (CHCA).** Kristal protein yang terbentuk ditembak dengan laser sehingga mengalami ionisasi. Ion yang terdeteksi oleh detektor di analisis dan di cocokkan dengan data base **SARAMIS (Spectral ARchive And Microbial Identification System).**

#### III. Hasil Analisis

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Kode Analisis** | **%** | **Takson Bakteri Terdekat Hasil Homologi data base SARAMIS** | | |
| **Family** | **Genus** | **Species** |
| **E-Coli** | 99.90 | ***Enterobacteriaceae*** | ***Escherichia*** | ***Coli*** |

**IV. Daftar Pustaka**

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Erhard et al. 2008., Identification of dermatophyte species causing onychomycosis and tinea pedis by MALDI-TOF mass spectrometry. *Exp Dermatol.* 17(4):356-61. 2008

Tamura, Hiroto., Hotta, Yudai., Yamamoto, Naomi., Sato, Hiroaki., Shima, Keisuke., Funatsu, Shinji., Yamazaki, Yuzo., Montgomery, Helen., Hosoda, Akifumi., Ojima, Noriyuki., 2013., Novel bacterial classification method by MALDI-TOF MS based on ribosomal protein coding in *S10-spc-alpha* Operon at Strain level

Cibinong, 20

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| Manajer Teknis,  (Dr. Atit Kanti, M.Sc)  **NIP. 196811021994032002** | Pelaksana,  (………………………..)  **NIP.** |