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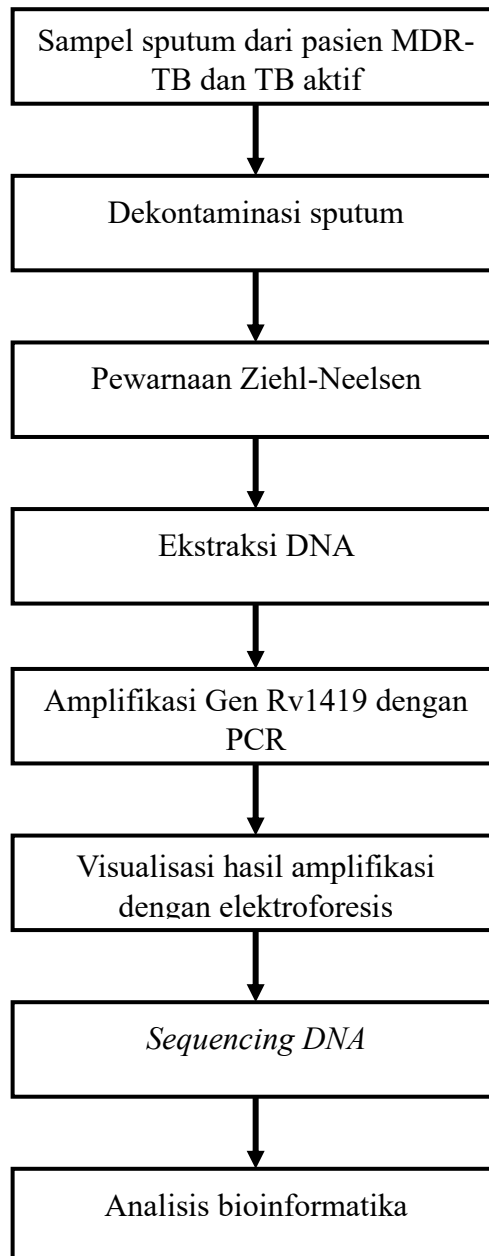
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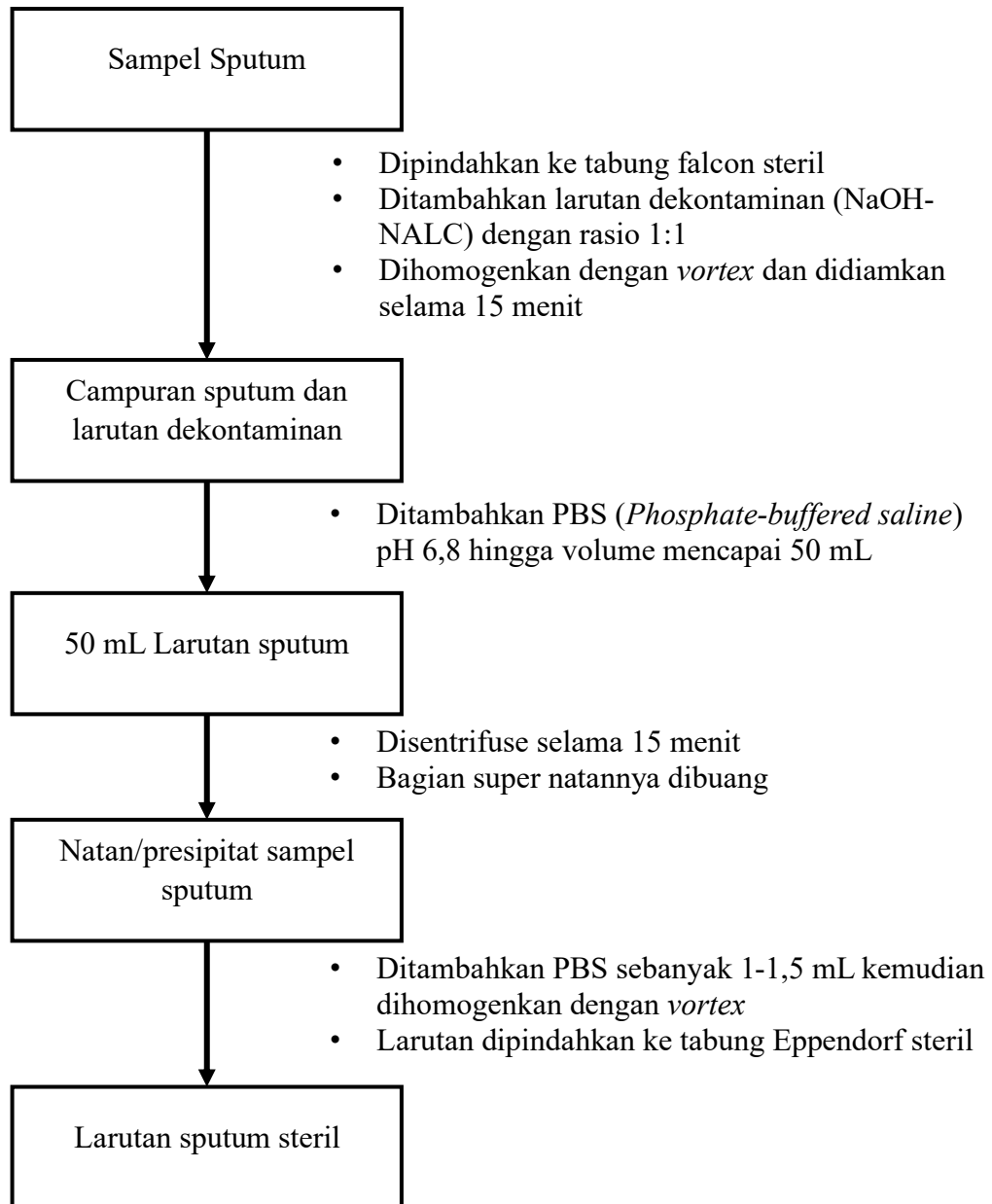
LAMPIRAN

Lampiran 1. Skema Kerja

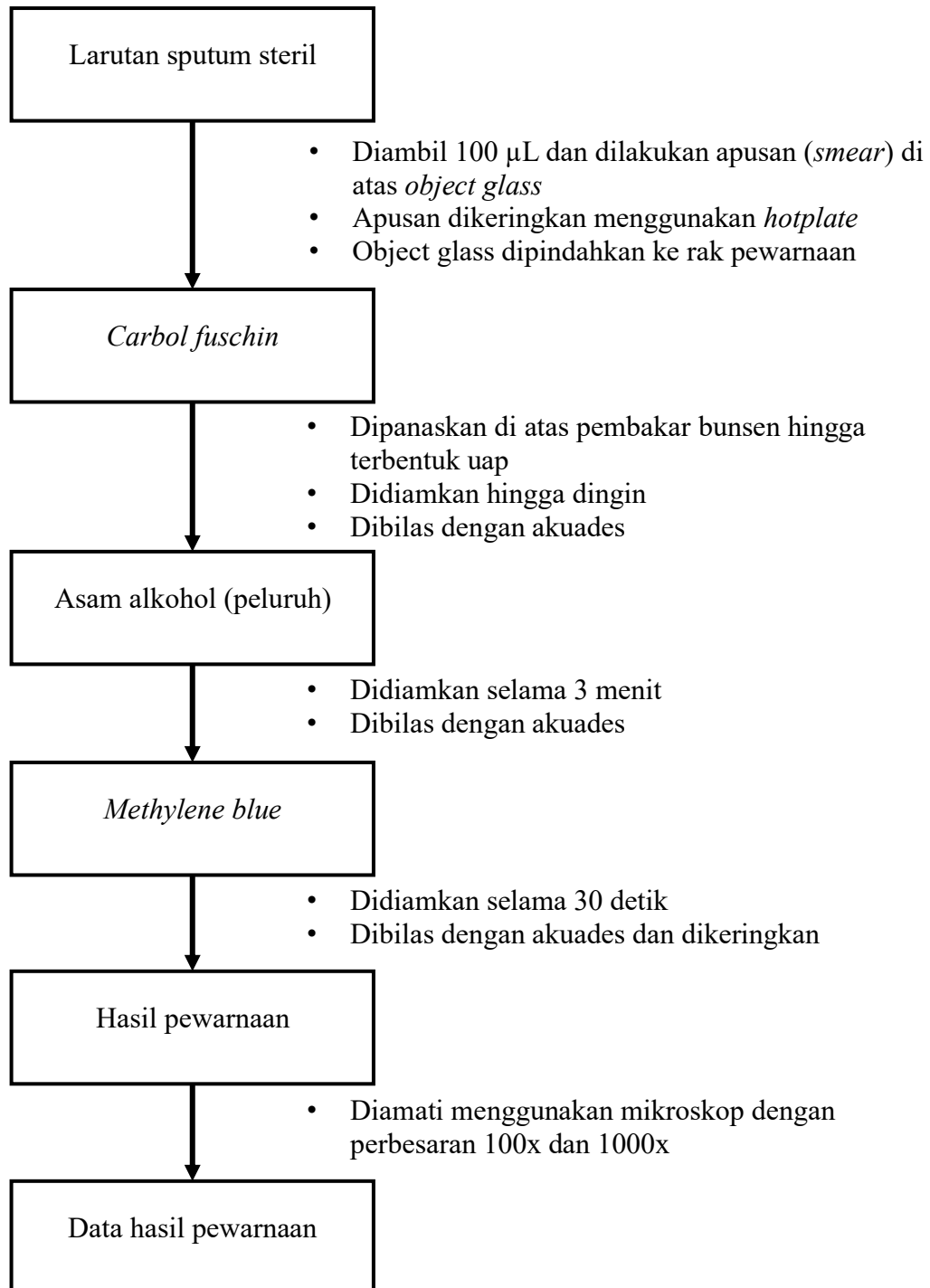
A. Skema Kerja Penelitian



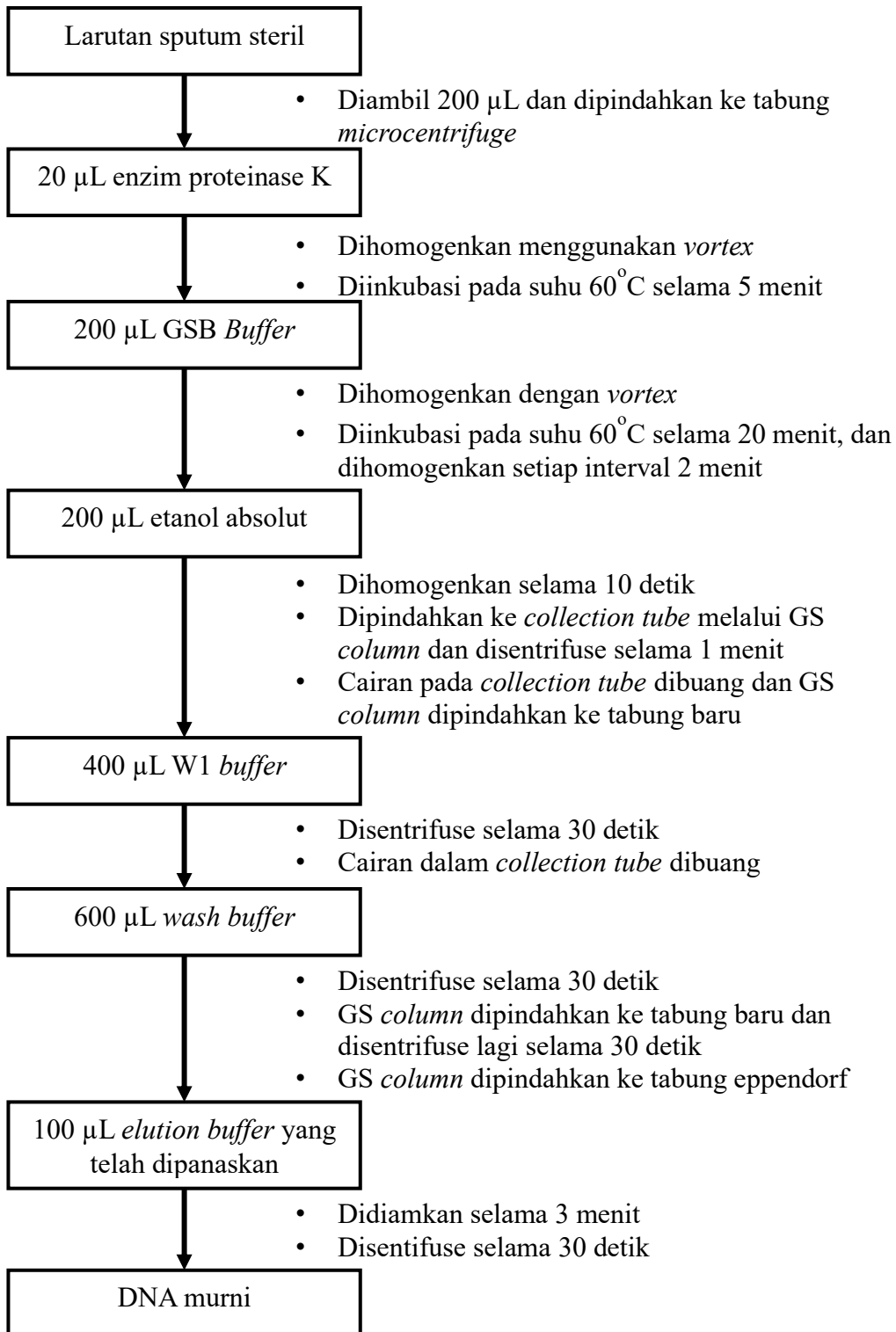
B. Skema Kerja Dekontaminasi Sputum



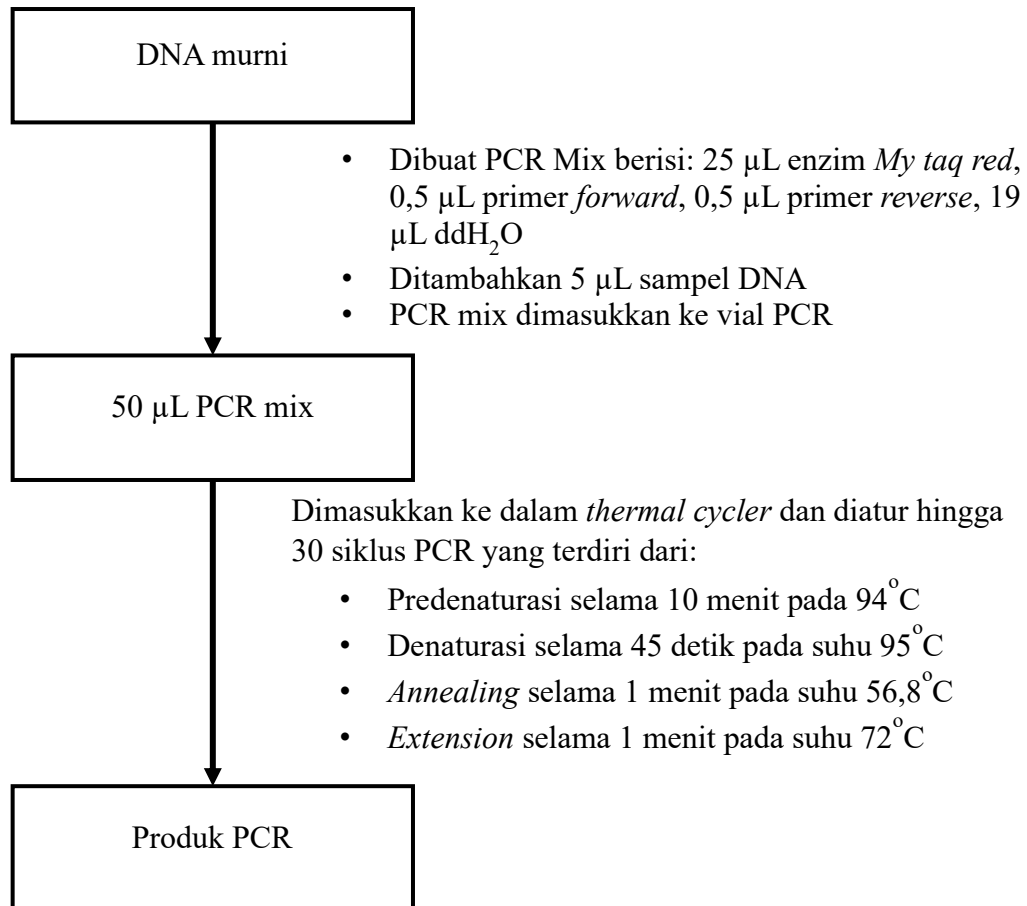
C. Skema Kerja Pewarnaan Ziehl-Neelsen



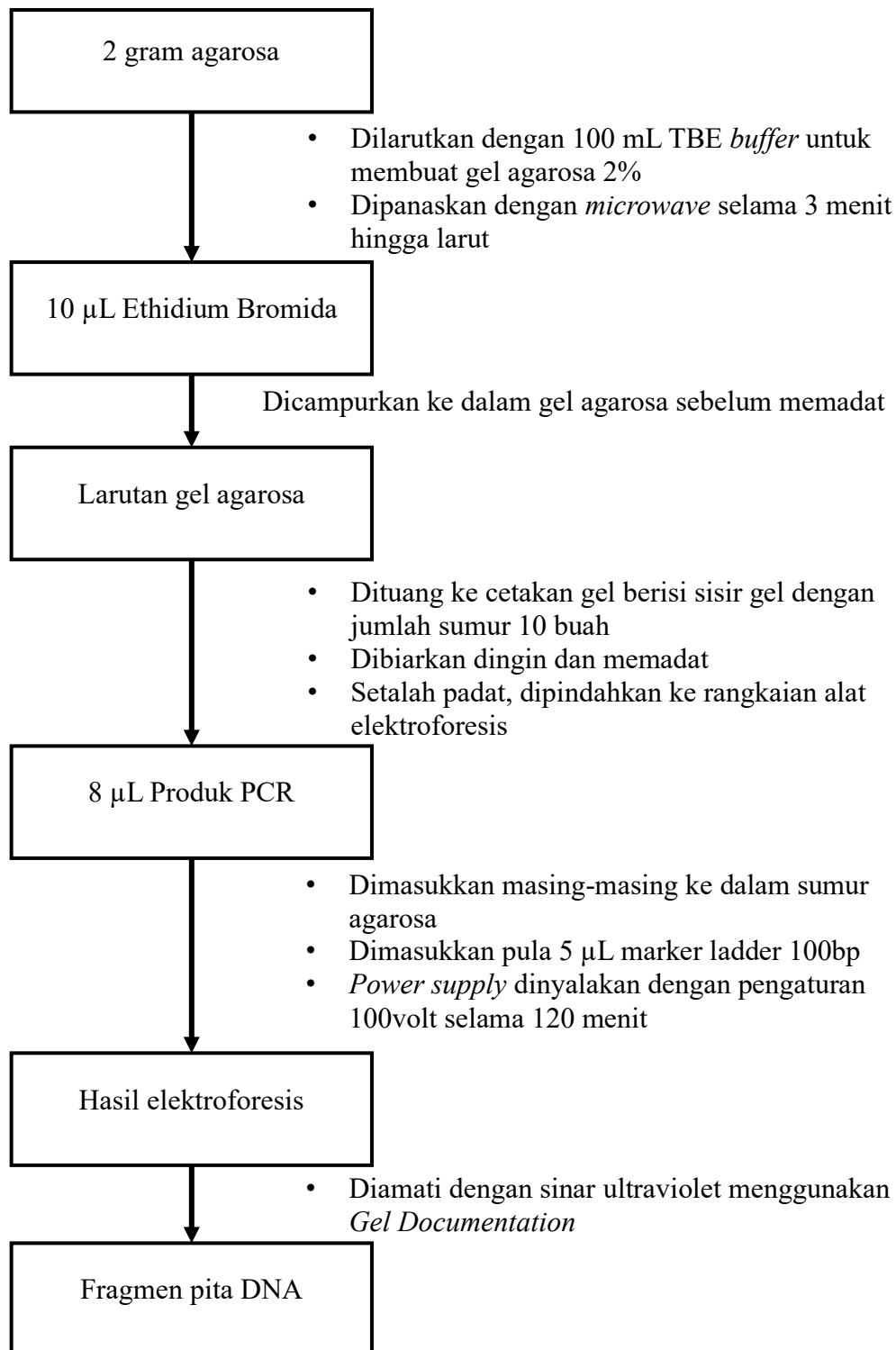
D. Skema Kerja Ekstraksi DNA



E. Skema Kerja Amplifikasi Gen Rv1419 dengan PCR



F. Skema Kerja Elektroforesis



Lampiran 2. Peta *Origin* antara Gen Rv1419 Primer dan dari DataBank

a. Sekuens Gen Rv1419 pada GenBank (NCBI, 2023)

NIH National Library of Medicine National Center for Biotechnology Information

Nucleotide Nucleotide Search Help

FASTA - Send to -

Mycobacterium tuberculosis H37Rv, complete genome
 NCBI Reference Sequence: NC_000962.3
[GenBank](#) [Graphics](#)

>NC_000962.3:1593505-1593978 Mycobacterium tuberculosis H37Rv, complete genome
 ATGGGTGAATTACGGTTGGTGGGCGGTGTGCTCCGGGTCTTGTCTGGTGGTGGTGGTTCGATGTGG
 CGGTGCTAAACGCCGGTGGGCTAGTGCAGCCGCGCCGGTCCAGCTGAAGAGCCGATTGGGCGATTTTG
 CCTGGACGCCCGAGTGGGAGCTGGTTACGCCCGCTGGTGTCAACCCCTGCAATGGGACCGACTTTCAG
 CGCTGGAATCTCACCAGTACCCGCGAGGTCGAGAGCGTGGCCTTCCCCGGGGAATGCGTGAATATCGGAA
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 CCTGGTCAAGAGTGATCTTGATGCCTGCCTCACGGTTCTCGGCGGTCCGGATCCTGGGACCTGGGTGTCC
 ACCCGCTGGTGGCAGCCCAATGCACCCGACCAACAGTGGGATAGCGTGCCGTAA

Change region shown
 Whole sequence
 Selected region
 from: 1593505 to: 1593978
 Update View

Customize view

Analyze this sequence
 Run BLAST
 Pick Primers

Related information
 Assembly
 BioProject
 Protein

b. Hasil Pemetaan Origin Primer pada Gen Rv1419

```

forward primer
5'--GATCGCTAGCATGGGTGAATTACGGTTG-3'
ATGGGTGAATTACGGTTGGTGGGCGGTGTGCTCCGGGTCTTGTCTGGTGGTGGTGGTTCGATGTGG
CGGTGCTAAACGCCGGTGGGCTAGTGCAGCCGCGCCGGTCCAGCTGAAGAGCCGATTGGGCGATTTTG
CCTGGACGCCCGAGTGGGAGCTGGTTACGCCCGCTGGTGTCAACCCCTGCAATGGGACCGACTTTCAG
CGCTGGAATCTCACCAGTACCCGCGAGGTCGAGAGCGTGGCCTTCCCCGGGGAATGCGTGAATATCGGAA
ATGCTTTGTGGGCGCCCTGCAGCCCTGTGTGAAGTGGATCAGCCAGCACTGGACTGTCCAGCCCGACGG
CCTGGTCAAGAGTGATCTTGATGCCTGCCTCACGGTTCTCGGCGGTCCGGATCCTGGGACCTGGGTGTCC
ACCCGCTGGTGGCAGCCCAATGCACCCGACCAACAGTGGGATAGCGTGCCG
3'--TGGGATAGCGTGCCGCTCGAGATA--5'
Reverse primer

forward primer
5'--GATCGCTAGCATGGGTGAATTACGGTTG-3'

reverse primer
5'--TATCTCGAGCGGCACGCTATCCCA-3'
3'--TGGGATAGCGTGCCGCTCGAGATA-5' (Reverse Compliment)
  
```

Lampiran 3. Komposisi Bahan

A. Komposisi Larutan Stok Dekontaminasi

Stok larutan NaOH-Sodium Sitrat:

NaOH 1 N : 20 gram, 500 mL akuades

Sodium Sitrat : 14,5 gram, 500 mL akuades

Stok larutan NaOH-NALC:

NaOH-Sodium sitrat : 100 mL

Massa NALC : 1 gram

Larutan stok PBS *buffer*:

Na₂HPO₄ : 300 mL (0,947%)

KH₂PO₄ : 200 mL (0,947%)

PBS *buffer* : 500 mL (0,067 M, pH 6,8)

B. Komposisi Reagen Ekstraksi DNA

Sampel sputum : 200 µL

Enzim Proteinase K : 20 µL

GSB *buffer* : 200 µL

Etanol absolut : 200 µL

W1 *buffer* : 400 µL

Wash *buffer* : 600 µL

Elusion *buffer* : 100 µL

C. Komposisi Larutan Stok Primer

Massa primer kering : 0,23 mg (26,1 nmol)

Volume ddH₂O : 261 µL

Konsentrasi stok : 100 µL (261 µL)

Pengenceran larutan stok:

$$V_1N_1 = V_2N_2$$

$$V_1 \cdot 100 = 100 \mu\text{L} \cdot 20$$

$$V_1 = 20 \mu\text{L} \rightarrow \text{Volume ddH}_2\text{O} = 80 \mu\text{L}$$

D. Komposisi PCR Mix

Enzim *mytaq red* : 25 µL

Primer *forward* : 0,5 µL

Primer *reverse* : 0,5 µL

ddH₂O : 19 µL

Sampel DNA : 5 µL

Volume Total : 25 µL

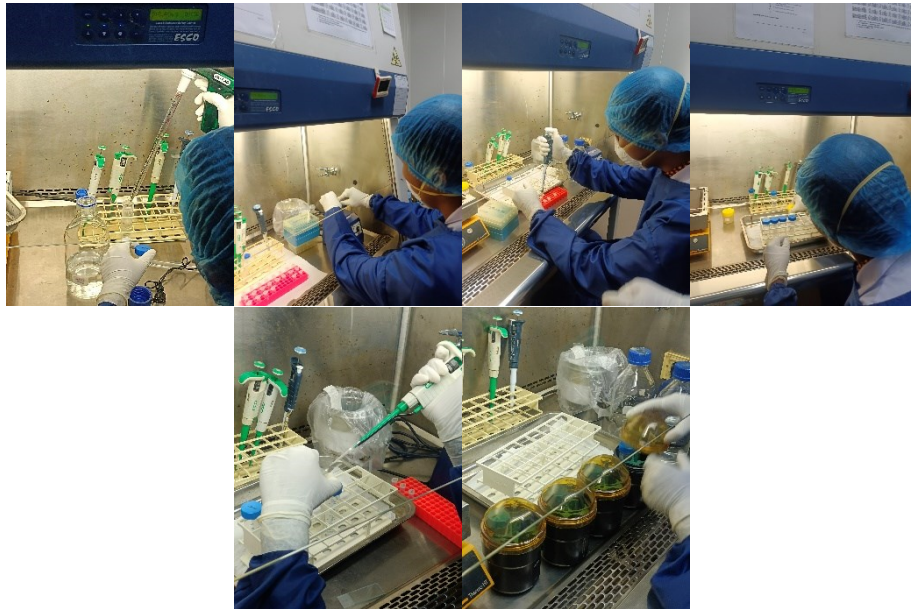
E. Komposisi Gel Agarosa

Berat agarosa : 2 gram

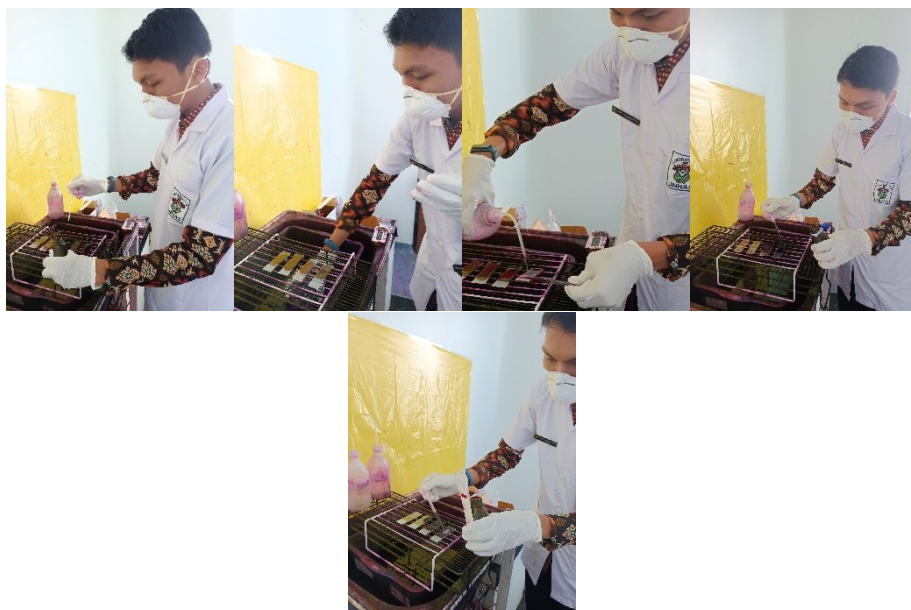
Volume TBE *buffer* : 100 mL

Lampiran 4. Dokumentasi Penelitian

A. Dekontaminasi Sputum



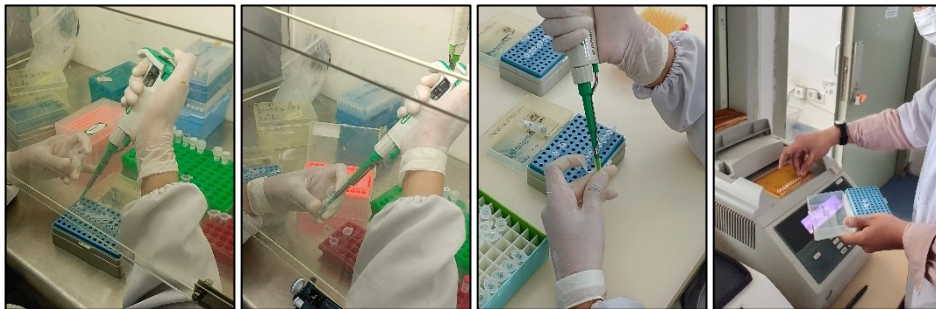
B. Pewarnaan Ziehl-Neelsen



C. Ekstraksi DNA



D. Amplifikasi Gen Rv1419 dengan PCR



E. Elektroforesis

