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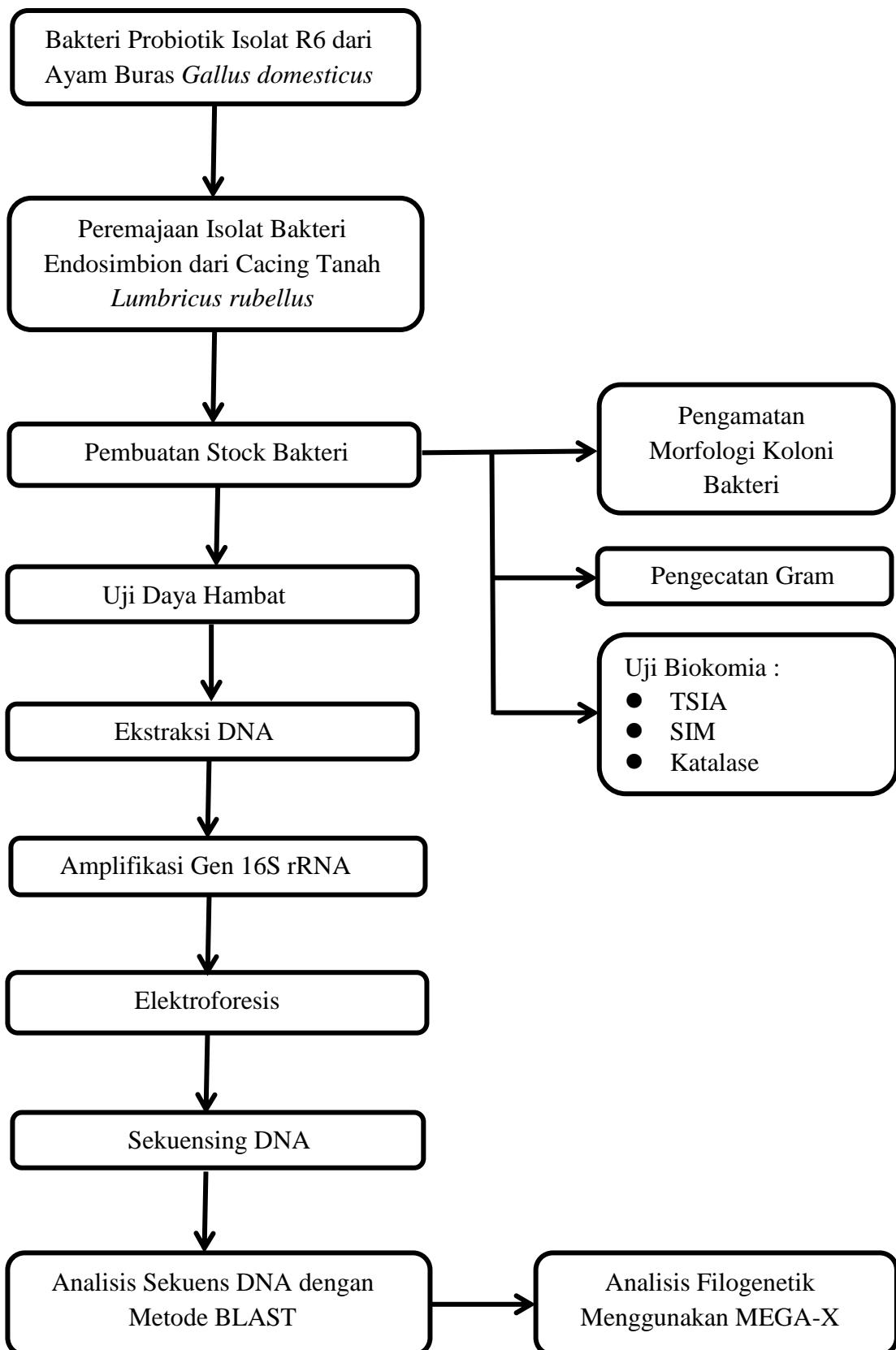
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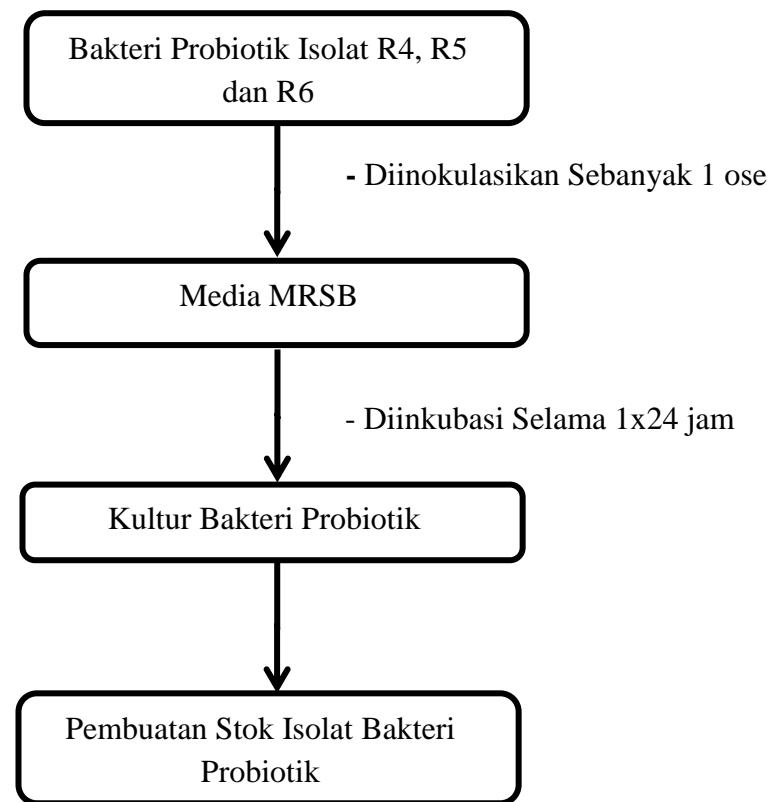
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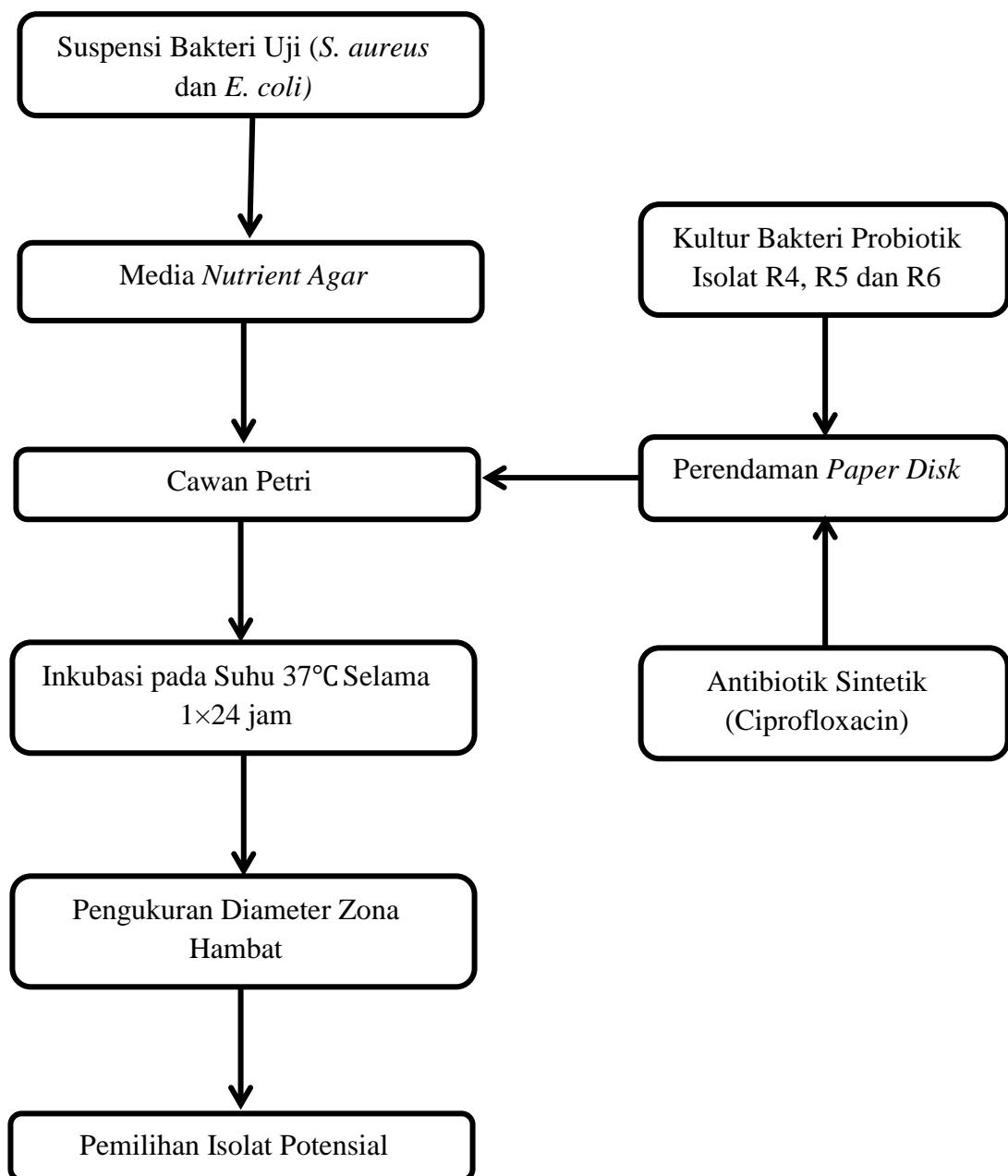
Lampiran 1. Skema Kerja Penelitian



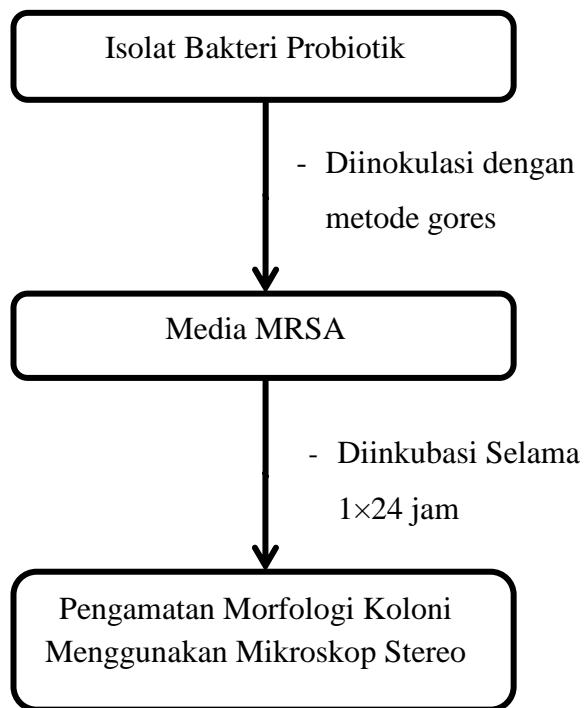
Lampiran 2. Skema Kerja Peremajaan Isolat Bakteri Probiotik



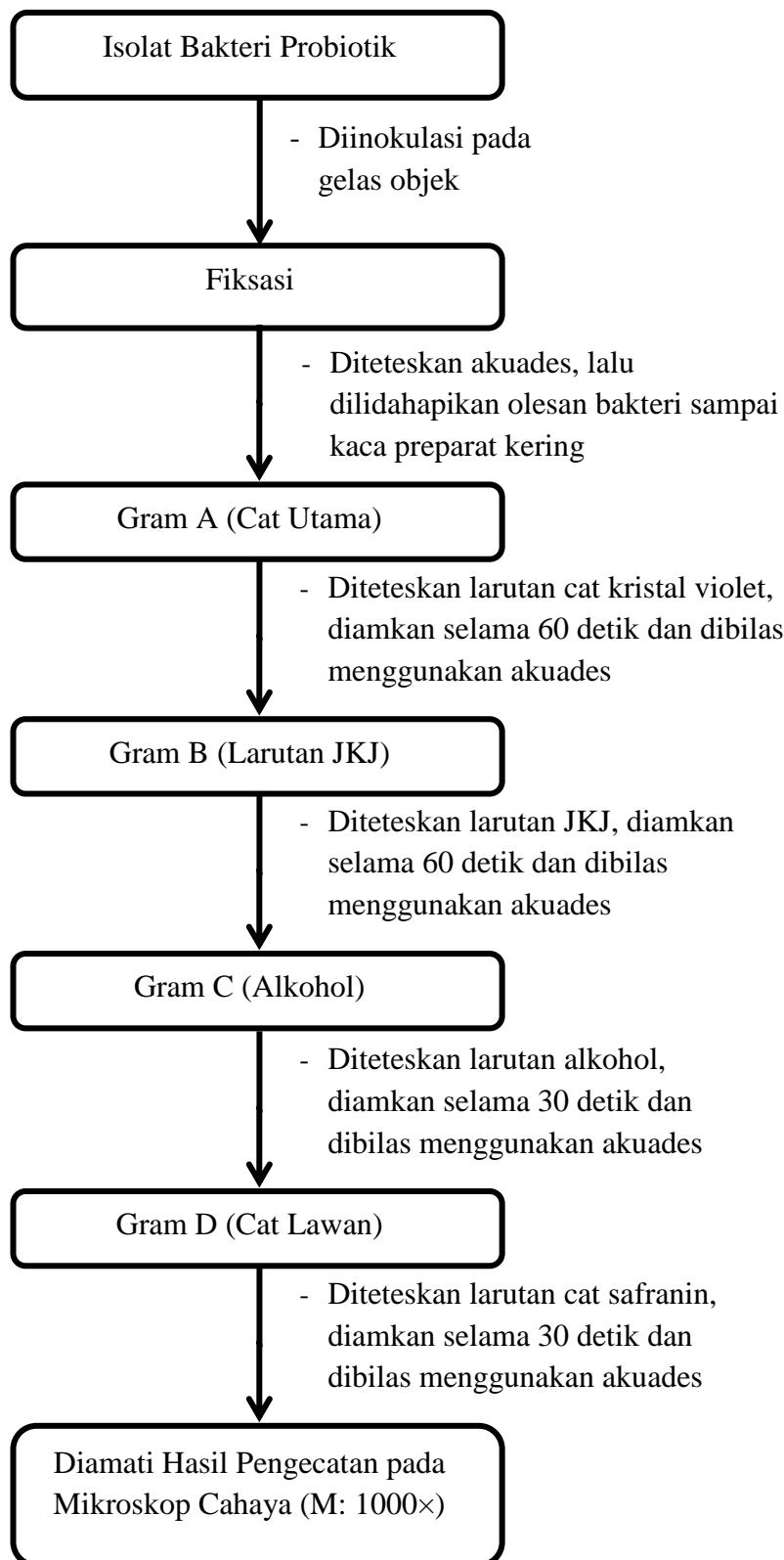
Lampiran 3. Skema Kerja Uji Daya Hambat Bakteri



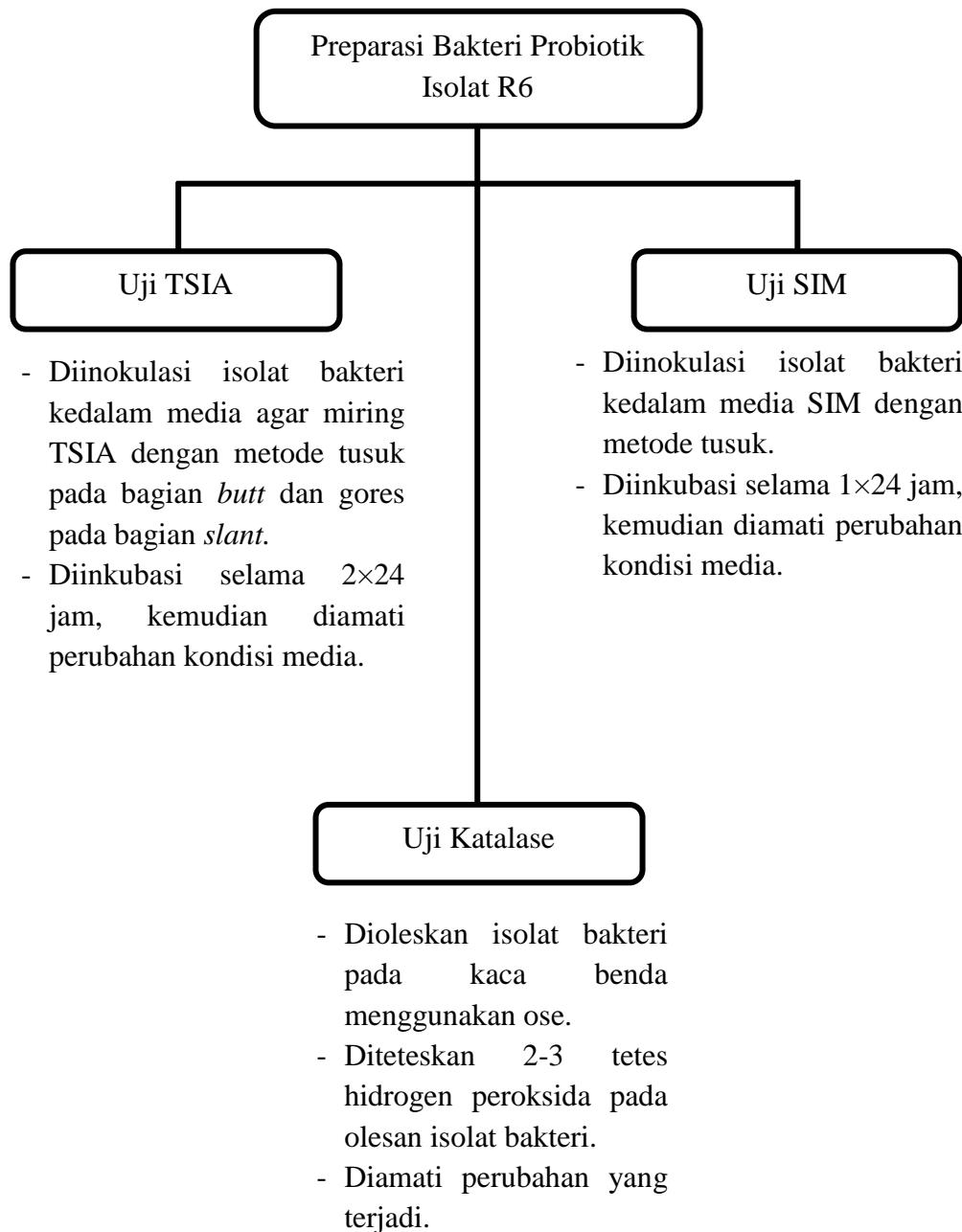
Lampiran 4. Skema Kerja Pengamatan Morfologi Koloni Bakteri Probiotik



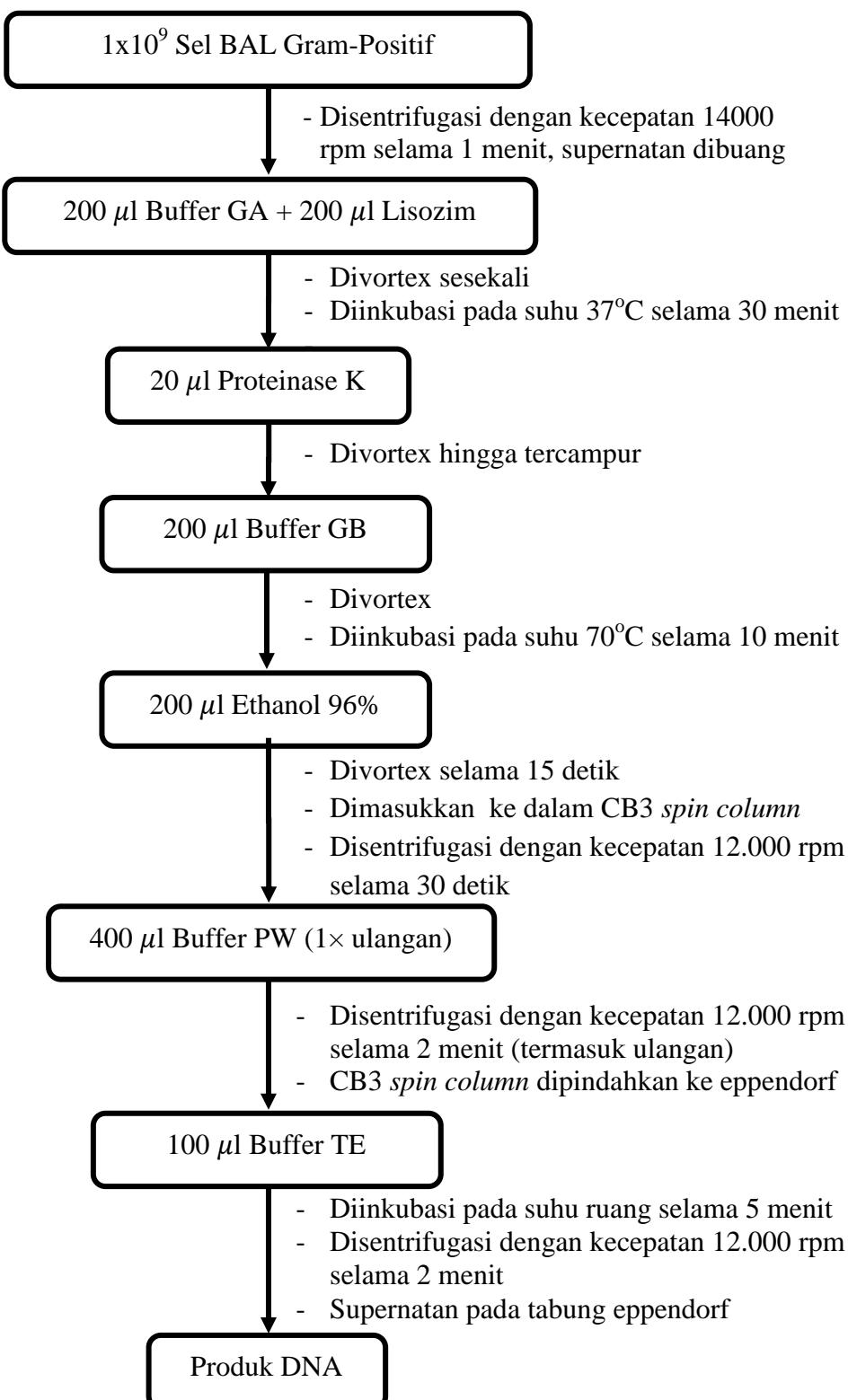
Lampiran 5. Skema Kerja Pengecatan Gram Bakteri Probiotik



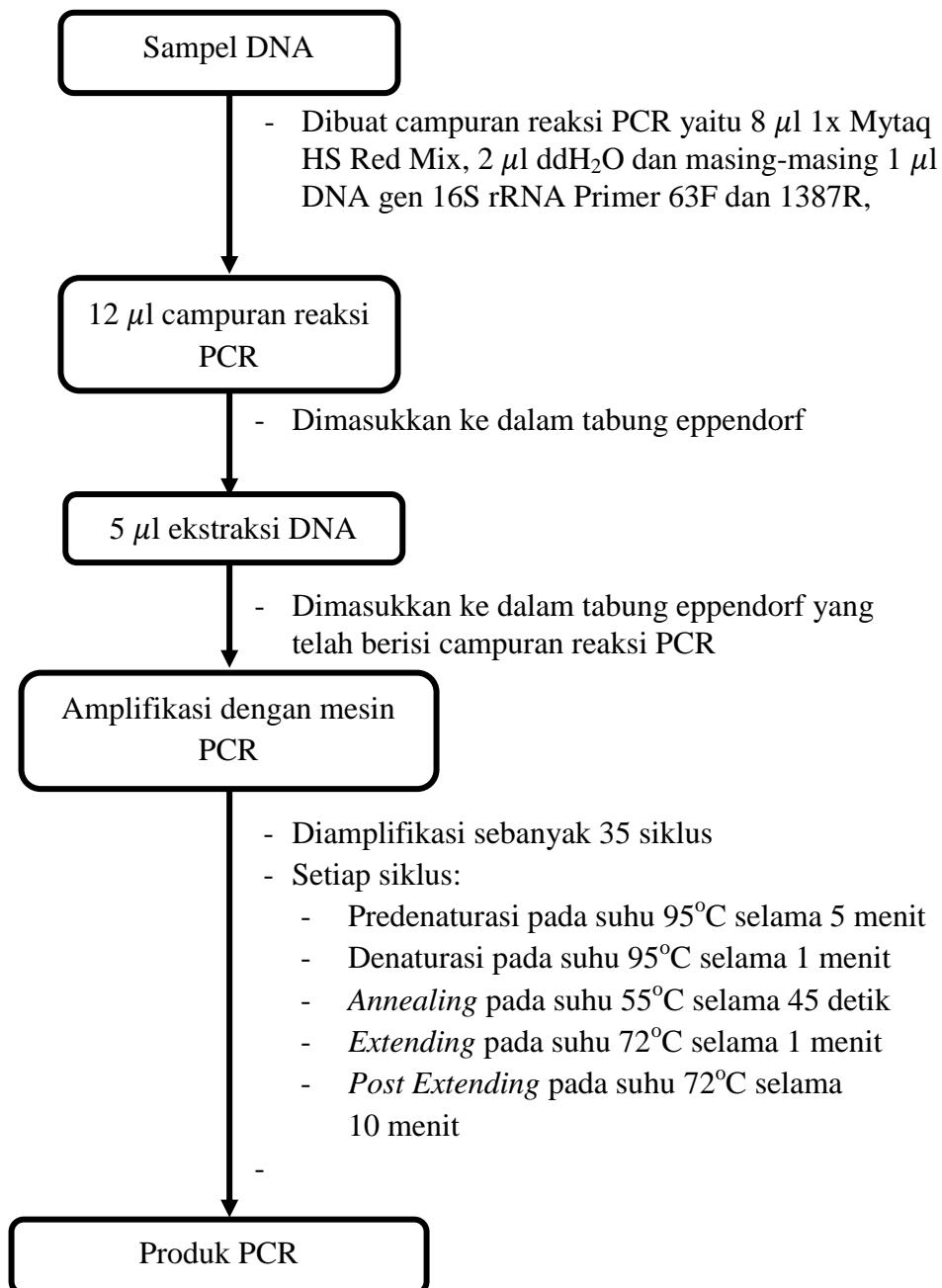
Lampiran 6. Skema Kerja Uji Biokimia Bakteri Probiotik



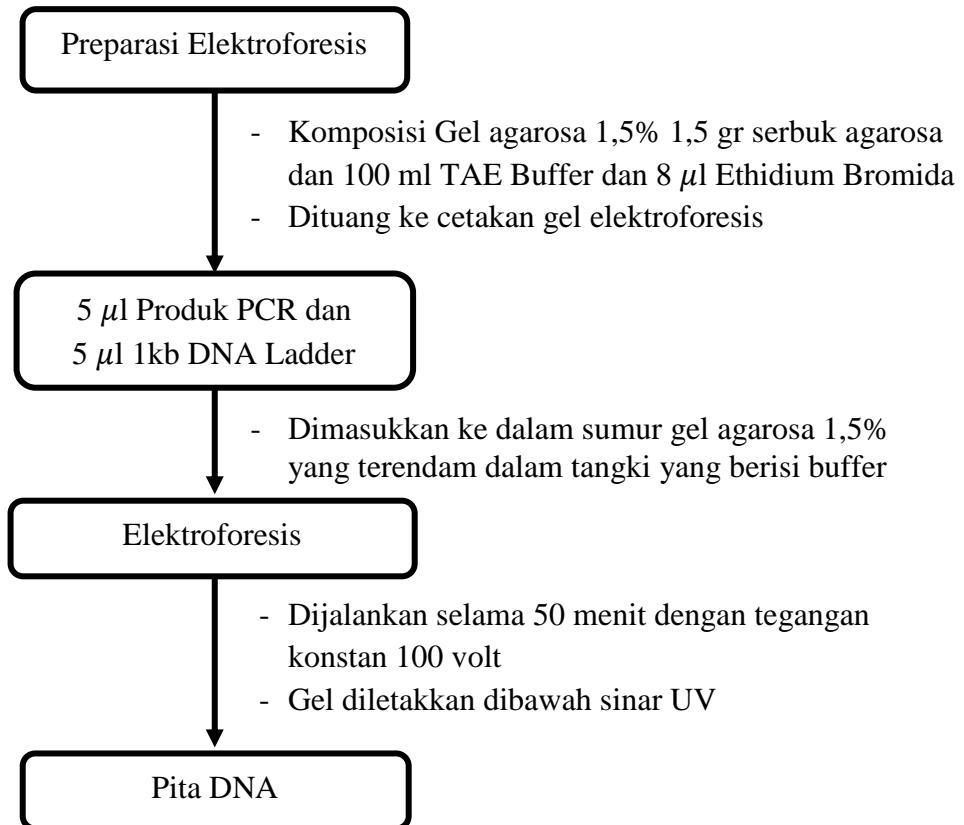
Lampiran 7. Skema Kerja Ekstraksi DNA Bakteri



Lampiran 8. Skema Kerja Amplifikasi DNA dengan PCR



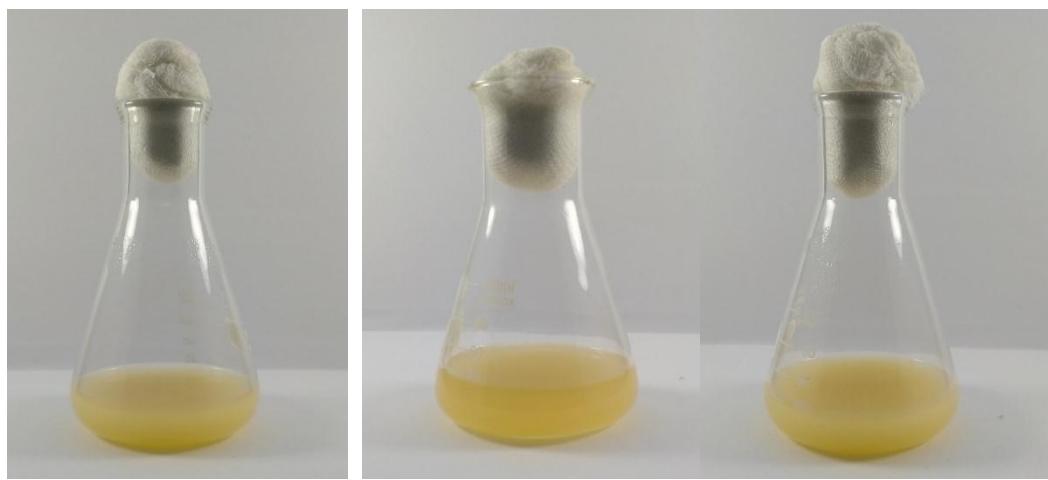
Lampiran 9. Skema Kerja Visualisasi Produk PCR dengan Elektroforesis



Lampiran 10. Dokumentasi Peremajaan dan Pembuatan Stok Isolat Bakteri Probiotik



Gambar 1. Proses Peremajaan Bakteri Probiotik Isolat R4, R5 dan R6



Gambar 2. Hasil Peremajaan Bakteri Probiotik Isolat (a) R4, (b) R5, (c) R6



Gambar 3. Stok Bakteri Probiotik Isolat (a) R4, (b) R5 dan (c) R6

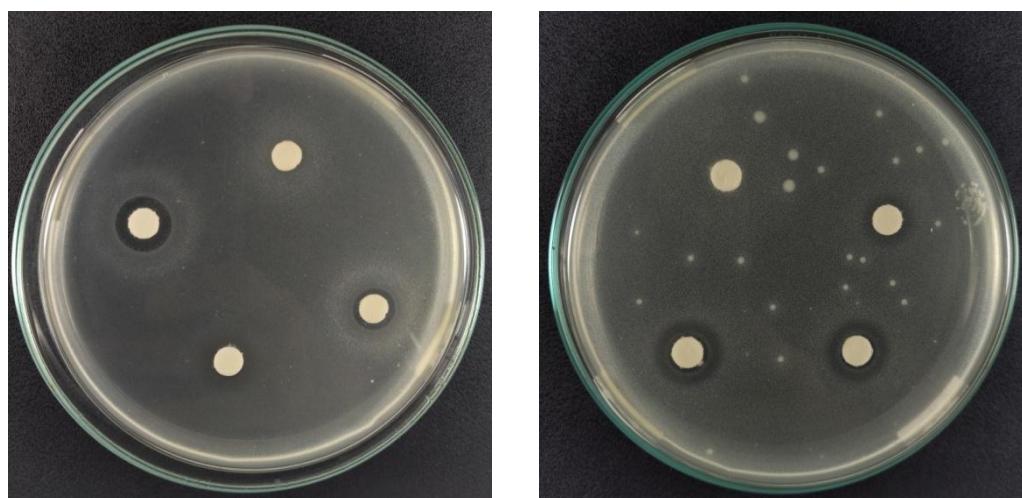
Lampiran 11. Dokumentasi Uji Daya Hambat Bakteri



Gambar 1. Preparasi Kultur Bakteri Probiotik dan Antibiotik Ciprofloxacin Menggunakan Kertas Cakram Steril

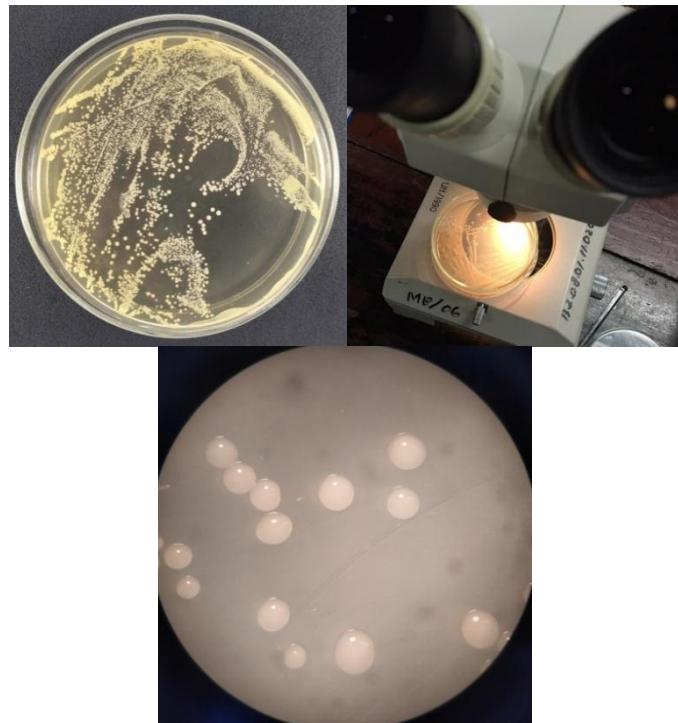


Gambar 2. Uji Daya Hambat Terhadap Bakteri Patogen *E. coli* dan *S. aureus*

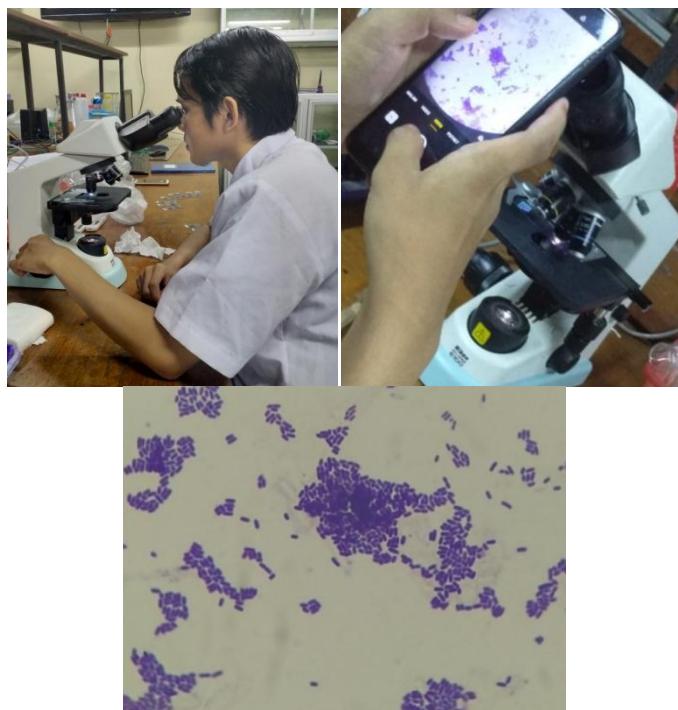


Gambar 3. Hasil Uji Daya Hambat Terhadap Bakteri Patogen *E. coli* dan *S. aureus*

Lampiran 12. Dokumentasi Pengamatan Morfologi Koloni dan Morfologi Sel Bakteri Probiotik Isolat R6



Gambar 1. Pengamatan Morfologi Koloni Bakteri Probiotik Isolat R6



Gambar 2. Pengamatan Morfologi Sel Bakteri Probiotik Isolat R6 dengan Teknik Pewarnaan Gram

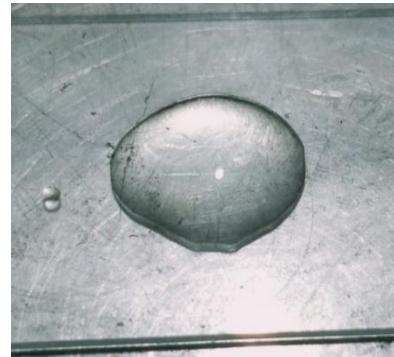
Lampiran 13. Dokumentasi Uji Biokimia Bakteri Probiotik Isolat R6



Gambar 1. Hasil Uji Motilitas Bakteri Probiotik Isolat R6



Gambar 2. Hasil Uji TSIA Bakteri Probiotik Isolat R6



Gambar 3. Hasil Uji Katalase Bakteri Probiotik Isolat R6

Lampiran 14. Dokumentasi Ekstraksi DNA Bakteri Probiotik Isolat R6



Gambar 1. Preparasi Kultur Bakteri Probiotik Isolat R6



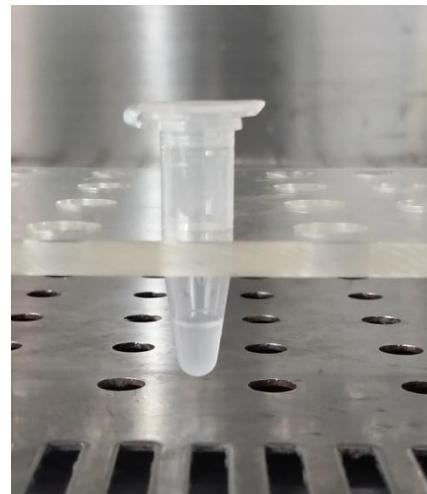
Gambar 2. Sentrifugasi Awal untuk Memisahkan Sel Bakteri dengan Medium Kultur (Supernatan)



Gambar 3. Tahap Preparasi dan Lisis Sel



Gambar 4. Tahap Pencucian dan Elusi

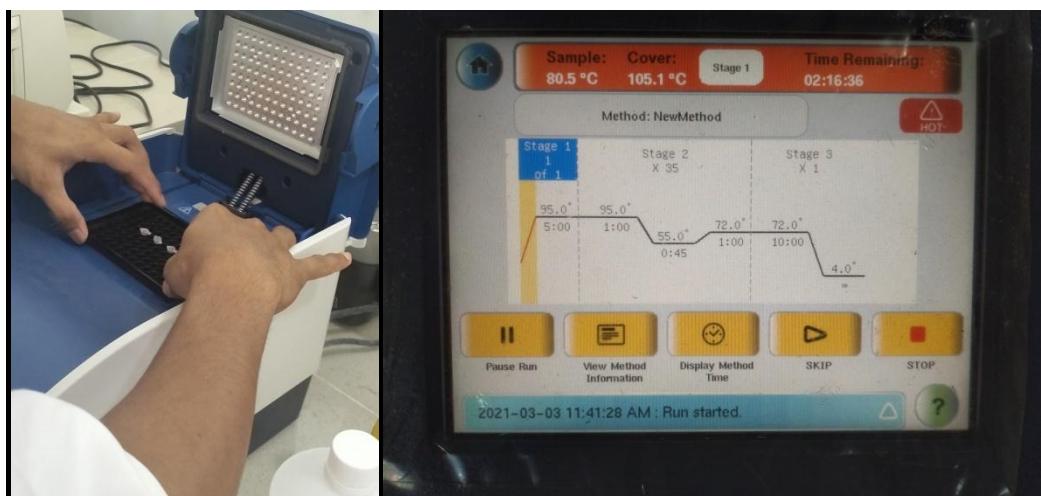


Gambar 5. Hasil Ekstraksi DNA yang Mengandung DNA Murni

Lampiran 15. Dokumentasi Amplifikasi DNA dengan PCR



Gambar 1. Pembuatan Campuran Reaksi untuk PCR

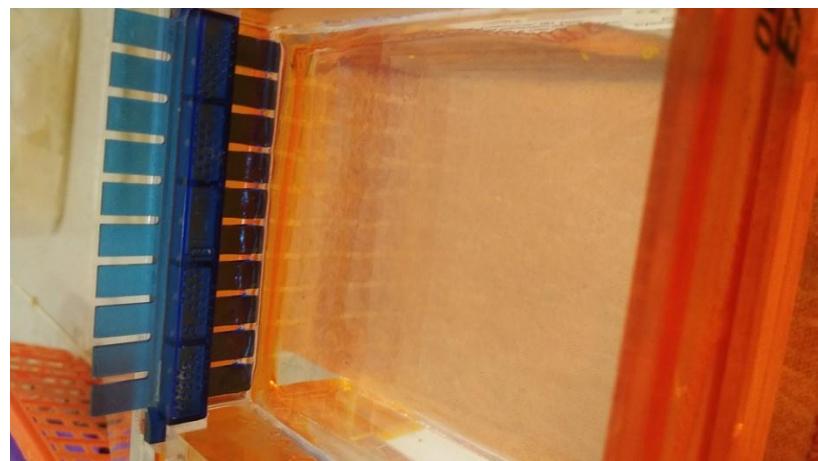


Gambar 2. Optimasi dan Proses Amplifikasi Sampel DNA dengan Primer Universal 16S rRNA

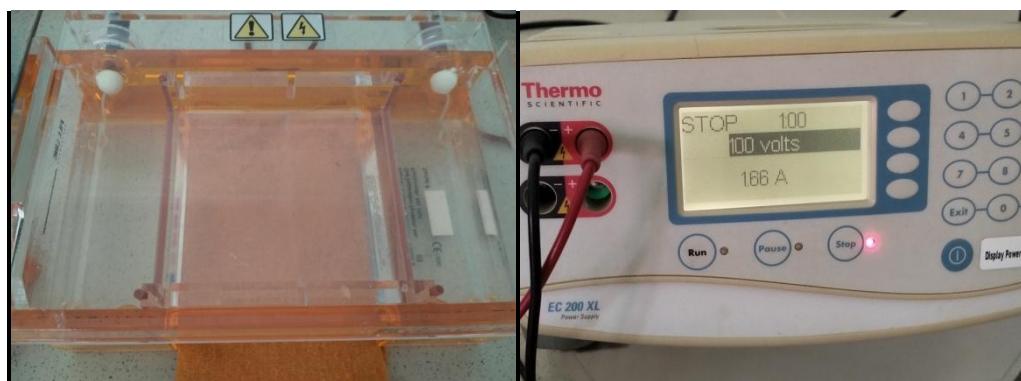


Gambar 3. Produk PCR

Lampiran 16. Dokumentasi Visualisasi Produk PCR dengan Elektroforesis



Gambar 1. Preparasi Bahan dan Mesin Elektroforesis

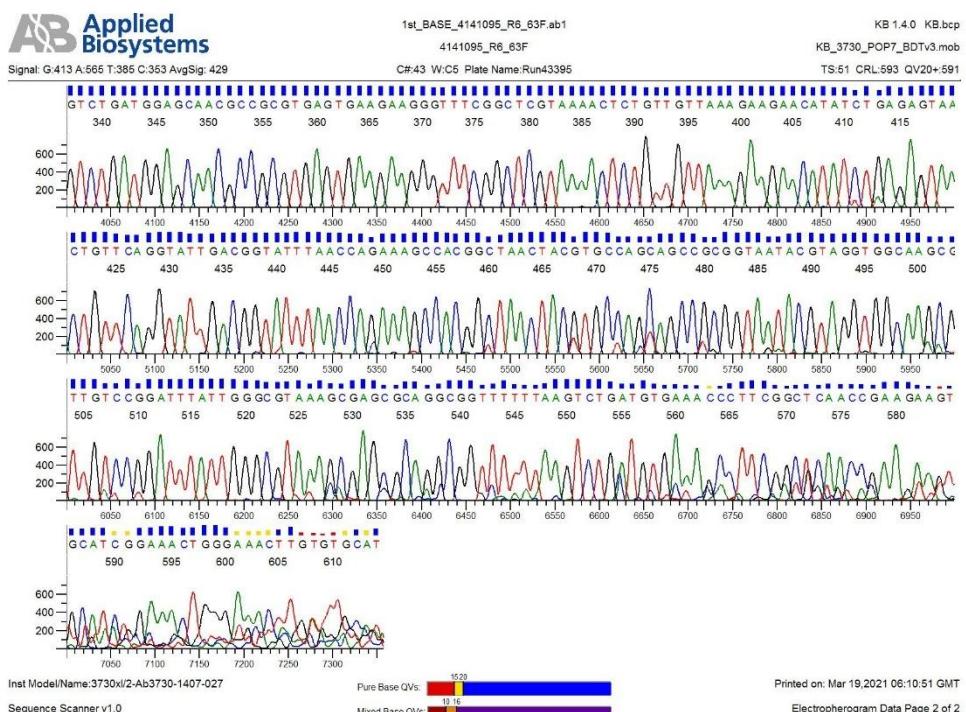
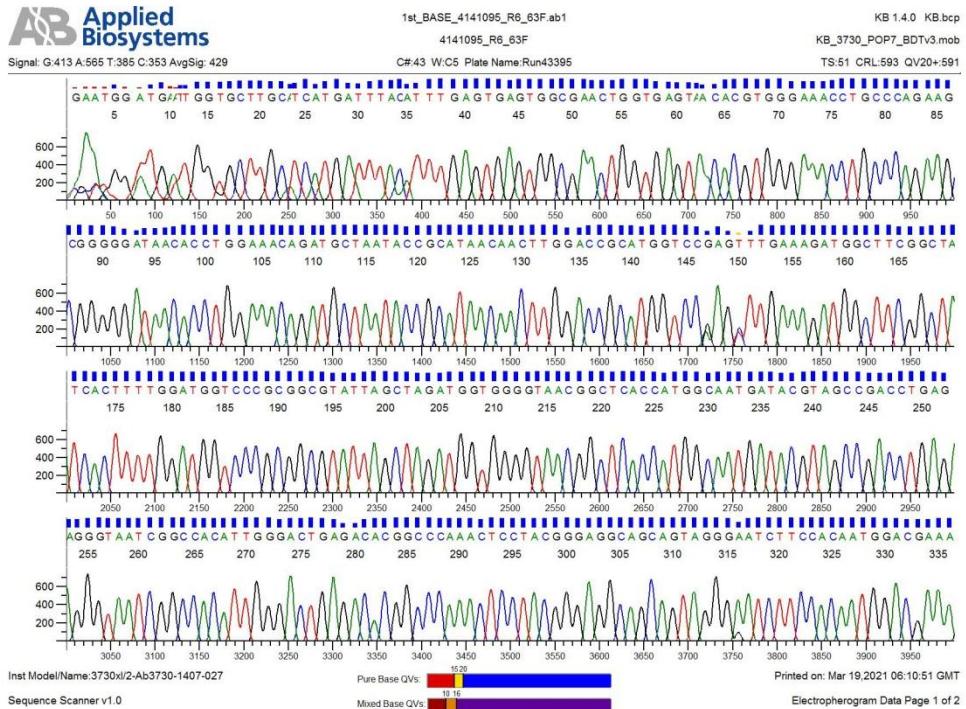


Gambar 2. Proses Elektroforesis Produk PCR dengan 1kb *DNA Ladder*

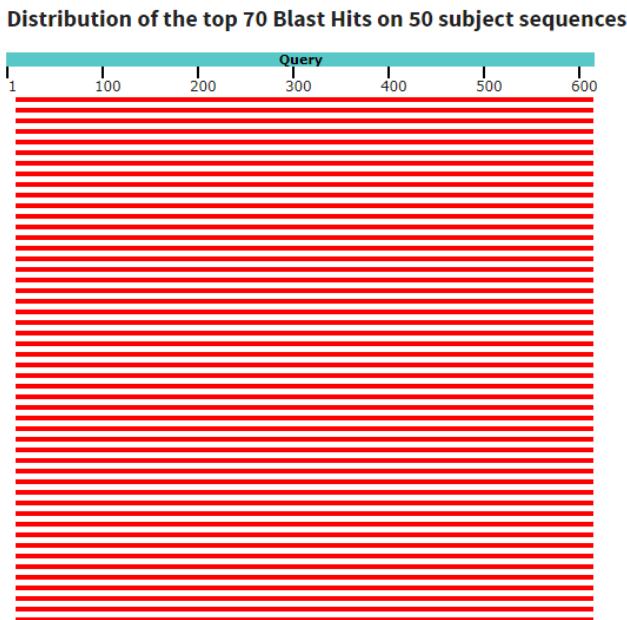


Gambar 3. Visualisasi Produk PCR Hasil Elektroforesis

Lampiran 17. Hasil Analisis Sekuens DNA Isolat R6



Gambar 1. Kromatogram Sekuens DNA Sampel Isolat R6



Gambar 2. Graphic Summary Sekuens DNA R6 dan Database Genebank

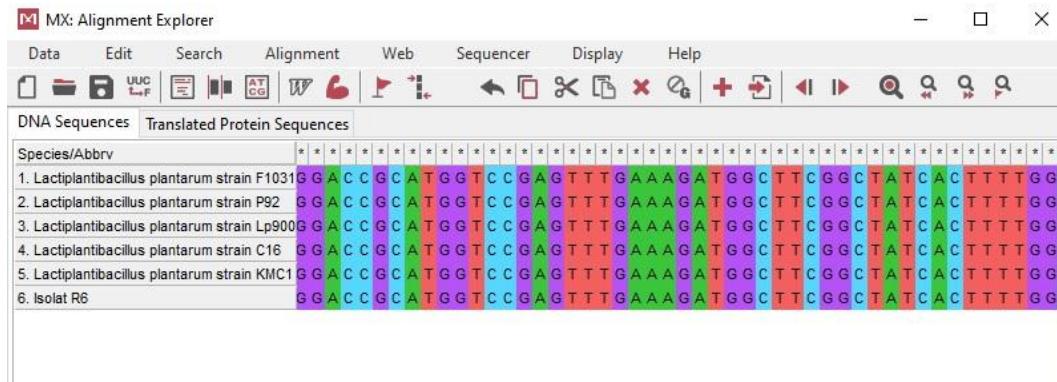
Lactiplantibacillus plantarum strain P92 16S ribosomal RNA gene, partial sequence

Sequence ID: [MW349864.1](#) Length: 976 Number of Matches: 1

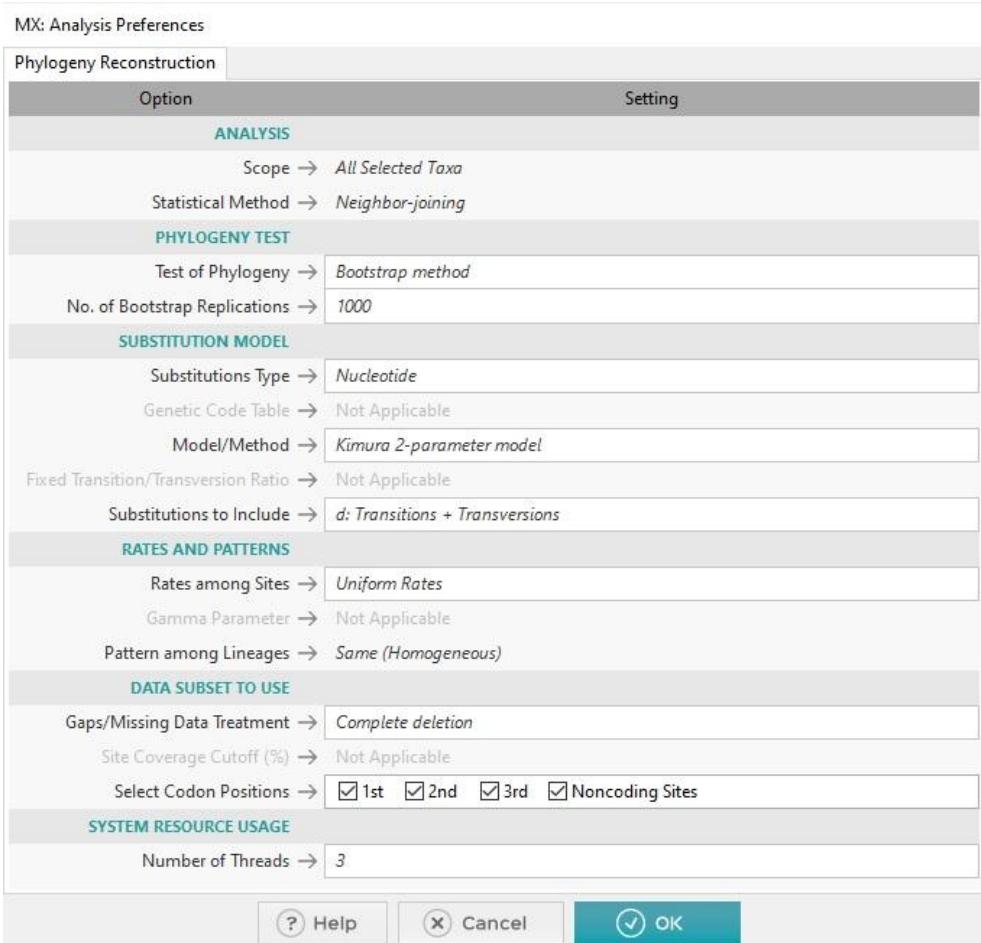
Range 1: 27 to 629 GenBank Graphics					▼ Next Match	▲ Previous Match
Score 1103 bits(597)	Expect 0.0	Identities 601/603(99%)	Gaps 0/603(0%)	Strand Plus/Plus		
Query 11	ATTGGTGCTTGCATCATGATTTACATTTGAGTGAGTGCGGAACCTGGTGAGTAACACGTGG	70				
Sbjct 27	ATTGGTGCTTGCATCATGATTTACATTTGAGTGAGTGCGGAACCTGGTGAGTAACACGTGG	86				
Query 71	GAAACCTGCCAGAACGGGGGATAAACACCTGGAAACAGATGCTAATACCGCATAACAAC	130				
Sbjct 87	GAAACCTGCCAGAACGGGGGATAAACACCTGGAAACAGATGCTAATACCGCATAACAAC	146				
Query 131	TTGGACCGCATGGTCCGAGTTGAAAGATGGCTTCGGCTATCACTTGGATGGTCCC	190				
Sbjct 147	TTGGACCGCATGGTCCGAGTTGAAAGATGGCTTCGGCTATCACTTGGATGGTCCC	206				
Query 191	GGCGTATTAGCTAGATGGGGGTAACGGCTCACCATGGCAATGATACTGAGCGGACCTG	250				
Sbjct 207	GGCGTATTAGCTAGATGGGGGTAACGGCTCACCATGGCAATGATACTGAGCGGACCTG	266				
Query 251	AGAGGTAATCGGCCACATGGGACTGAGACACGCCAAACT CCTACGGAGGCAGCAG	310				
Sbjct 267	AGAGGTAATCGGCCACATGGGACTGAGACACGCCAAACT CCTACGGAGGCAGCAG	326				
Query 311	TAGGGAAATCTTCCACAAATGGACGAAAGTCTGATGGAGCAACGCCGTGAGTGAAGAAGG	370				
Sbjct 327	TAGGGAAATCTTCCACAAATGGACGAAAGTCTGATGGAGCAACGCCGTGAGTGAAGAAGG	386				
Query 371	GTTCGGCTCGTAAACCTCTGTTAAAGAAGAACATATCTGAGAGTAACGTTCAGGT	430				
Sbjct 387	GTTCGGCTCGTAAACCTCTGTTAAAGAAGAACATATCTGAGAGTAACGTTCAGGT	446				
Query 431	ATTGACGGTATTAAACCAAAGCCACGGCTAACACTGCGCAGCAGCGCGTAATACG	490				
Sbjct 447	ATTGACGGTATTAAACCAAAGCCACGGCTAACACTGCGCAGCAGCGCGTAATACG	506				
Query 491	TAGGGCAAGCGTTCCGGATTATTGGCGTAAGCGAGCGCAGGCGTTTTAAG	550				
Sbjct 507	TAGGGCAAGCGTTCCGGATTATTGGCGTAAGCGAGCGCAGGCGTTTTAAG	566				
Query 551	TCTGATGTGAAACCCTCGGCTAACCGAAGAAGTGCATCGAAACTGGAAACTTGTGT	610				
Sbjct 567	TCTGATGTGAAACCCTCGGCTAACCGAAGAAGTGCATCGAAACTGGAAACTTGTGT	626				
Query 611	GCA 613					
Sbjct 627	GCA 629					

Gambar 3. Hasil Analisis Pensejajaran (*Alignment*) sekuen DNA Isolat R6 dengan Database GeneBank (*Accession MW349864.1*)

Lampiran 18. Pembuatan Pohon Filogenetik Menggunakan MEGA-X



Gambar 1. Hasil Allignment Sampel Menggunakan ClustalW MEGA-X



Gambar 2. Proses Phylogeny Reconstruction