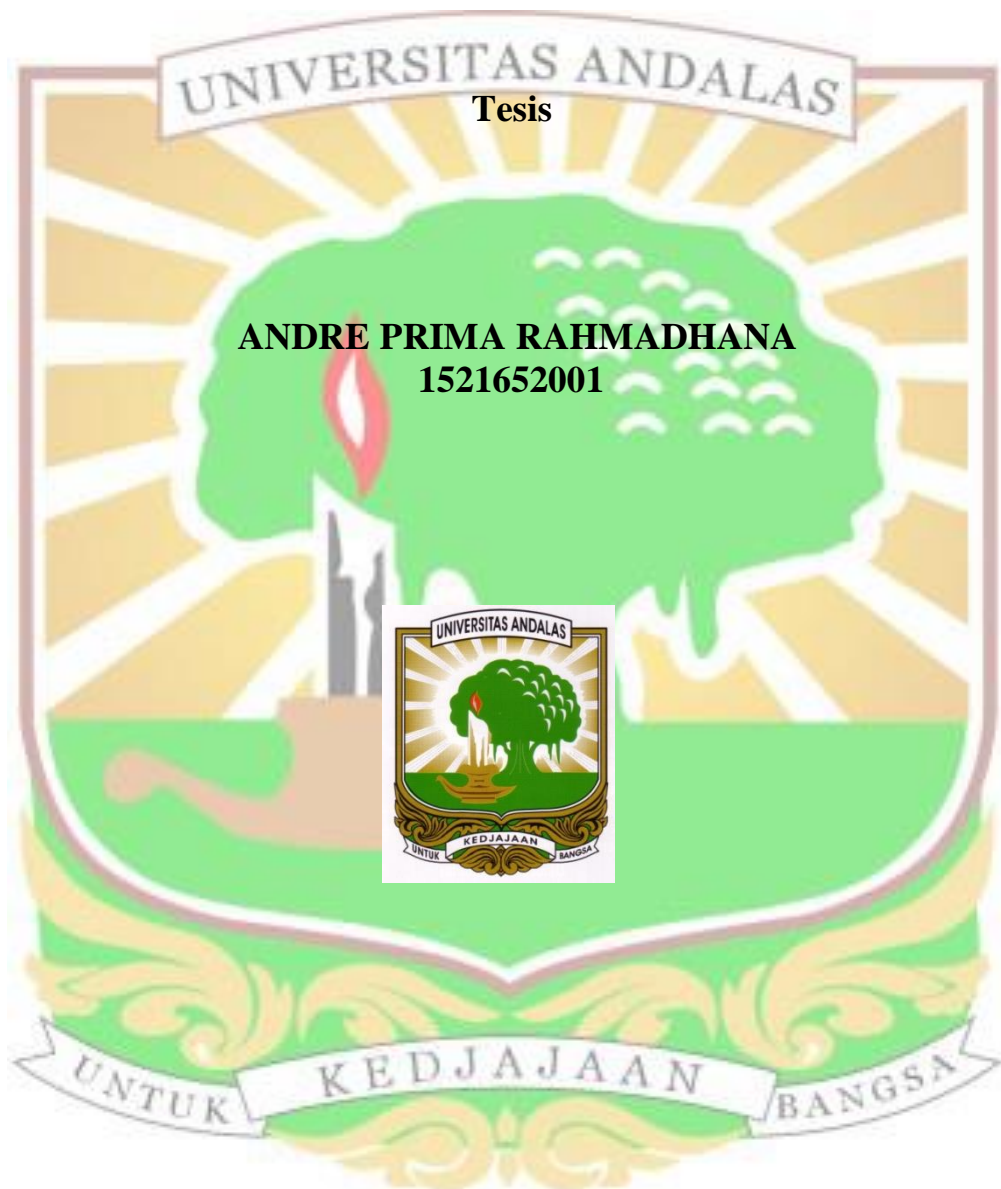


**ANALISIS VARIASI GENETIK GEN L1 HPV TIPE 16 ASAL  
SUMATERA BARAT DAN TRANSLASI PROTEIN GEN L1  
HPV 16 SECARA IN SILICO**



**Tesis**

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# ANALISIS VARIASI GENETIK GEN L1 HPV (*Human Papilloma Virus*) TIPE 16 ASAL SUMATERA DAN TRANSLASI PROTEIN GEN L1 HPV 16 SECARA IN SILICO

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## Abstrak

Variasi nukleotida gen L1 terhadap data terkait di *Gene Bank* dilakukan dengan menggunakan 5 isolat DNA tipe 16 asal sumbar dimana setelah diamplifikasi hanya 2 yang berhasil di amplifikasi dan dilanjutkan dengan tahap sekuensing yakni sampel 3 dan sampel 4. Analisis dilakukan menggunakan data sekuensing untuk kemudian dilakukan blast, konstruksi pohon filogenetik dan visualisasi protein secara in silico. Hasil analisa data sekuensing menunjukkan sampel 3 memiliki kekerabatan dengan sekuen L1 di Gene Bank KU.9551191.1 dan sampel 4 memiliki kekerabatan dengan sekuen L1 JX313706.1. Analisa jarak genetik menggunakan Mega 6 menunjukkan ada selisih jarak kekerabatan antara sampel 3 dan sampel 4 sejauh 0,017 %.

Kata Kunci: Gen L1, pohon filogenetik, primer BLAST, HPV 16, sekuensing.

**ANALYSIS OF GENETIC VARIATION OF L1 GENE HPV (Human Papilloma Virus) TYPE 16 SUMATERA ORIGIN AND PROTEIN IN SILICO TRANSLATION OF L1 HPV 16 GENE**

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**Abstract**

The nucleotide variation of the L1 gene with respect to the related data in Gene Bank was carried out using 5 type 16 DNA isolates from the source where after amplification only 2 were successfully amplified and followed by sequencing stages namely sample 3 and sample 4. The analysis was carried out using sequencing data to be blasted, the construction of phylogenetic trees and protein visualization in silico. The results of the sequencing data analysis showed that sample 3 had a relationship with the L1 sequence in Gene Bank KU. 951191.1 and sample 4 had a relationship with the sequence L1 JX313706.1. Genetic distance analysis using Mega 6 shows that there is a difference in kinship distance between sample 3 and sample 4 as far as 0.017%.

Keywords: L1 Gene, Phylogenetic tree, Primer BLAST, HPV 16, sekuencing

