

## Studi in silico pengaruh mutasi protein vp35 terhadap reaktivitas virus ebola di zaire = In silico mutation study of viral protein vp35 on zaire ebola virus / Tika Wulandari

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### Abstrak

[Ebola adalah penyakit endemik yang telah terjadi selama tiga puluhan tahun setelah pertama kali ditemukan di daerah Afrika Barat pada tahun 1976. Penyakit ini disebabkan oleh virus ebola (EBOV) yang adalah salah satu bagian dari famili Filoviridae atau filovirus. Kasus ebola tidak dilaporkan secara intens, karena sifatnya yang endemik, namun tidak dapat dipungkiri, penyakit ini tetap memakan korban. Beberapa tahun terakhir, wabah ini merebak dan kembali menjadi pembicaraan hangat. Penyebaran tersebut dikhawatirkan terjadi akibat adanya mutasi virus. Beberapa bagian lain mengkhawatirkan penggunaan virus tersebut dalam tindakan bioterorisme. Perkembangan virus dipengaruhi juga oleh proses replikasi, sehingga replikasi menjadi salah satu faktor penentu terjadinya penyakit. Pada ebola, replikasi dipengaruhi oleh protein VP35. Ilmu bioinformatika dianggap mampu menjadi salah satu cara menganalisis mutasi protein tersebut secara in silico, sehingga diharapkan para ilmuwan mampu menemukan desain inhibitor potensial untuk melawan ebola secara in vivo. Secara in silico telah diketahui perubahan yang terjadi pada VP35 virus ebola saat ini dibandingkan dengan yang ditemukan pertama kali pada tahun 1976. Perbedaan tersebut terjadi dalam hal susunan residu asam amino penyusun protein, terbukti dengan analisis pohon filogenetik, dan analisis lanjutan.

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