

Anti-HIV-1 activities in extracts from some medicinal plants as assessed in an in vitro biochemical HIV-1 reverse transcriptase assay.

Kanyara JN, Njagi EN.

An in vitro HIV-1 reverse transcriptase (RT) assay was used for screening of anti-HIV activity of extracts obtained from some Kenyan medicinal plants. The assay utilises [3H]-methyl thymidine triphosphate (dTTP) as the enzyme substrate and polyadenylic acid. oligodeoxythymidylic acid [poly(rA).p(dT)(12-18)] as the template-primer dimmer. This assay was optimised and standardised with respect to the various experimental parameters in a microtiter plate methodology. The assay was then applied to test for potential antiviral activities of several Kenyan medicinal plant extracts and the concentrations producing 50% inhibition (IC₅₀) of the HIV-1 RT were determined. This assay is described in this report and results obtained with some of the extracts are presented