NEW INHIBITOR SUPPRESSES FOOT-AND-MOUTH DISEASE (FMD)

Foot-and-mouth Disease Virus (FMDV) is a positive stranded picornavirus that can infect cloven-hoofed animals, such as cattle, pigs and sheep, and lead to severe losses in livestock production. The delay in eradication or control of FMD is associated with billions of dollars in potential economic losses. Although antiviral drugs can have immediate prophylactic and/or therapeutic effects, there is currently no approved anti-viral therapy available to treat ongoing infections with FMDV or to protect animals from FMDV infection. Thus, an anti-viral drug has a strong market potential in agricultural states.

The current invention developed by researchers at the University of Missouri is a small molecule that inhibits the RNA polymerase activity of the FMDV 3Dpol. The molecule has demonstrated the suppression of virus production in FMDV-infected cells and is a strong candidate for the development of alternatives or supplementary options to contain future outbreaks of Foot-and-Mouth Disease.

POTENTIAL AREAS OF APPLICATIONS:
- Prevention of Foot-and-Mouth Disease
- Treatment of Foot-and-Mouth Disease

PATENT STATUS: Patent application in preparation
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