Testing for Virucidal Activity of Manorapid Synergy (Antiseptica) vs. bovine rotavirus (BRV)

Scientific Report

Of the research work ordered and sponsored by Antiseptica chem.-Pharm.prod.GmbH (Pulheim-Brauweiler, Germany)
And performed in the Stephan Angeloff Institute of Microbiology (Department of Virology), Bulgarian Academy of Sciences (Sofia, Bulgaria)

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A SHORT DESCRIPTION OF THE VIRUCIDAL TESTING SETUP USED

The testing of the disinfectant composition MANORAPID SYNERGY (ANTISEPTICA) followed strictly the "Guidelines of Bundesgesundheitsamt (BGA) and Deutsche Vereinugung zur Bekaempfung der Viruskrankheiten e.V. (DVV) for Testing the Effectiveness of Chemical Disinfectants Against Viruses" [Zbl. Hyg. 189, 554-562 (1990)].

MANORAPID SYNERGY (ANTISEPTICA) [ManSyn] was tested for virucidal activity vs. bovine rotavirus (Negovan strain) (BRV).

The contact suspension test (standard suspension test) in vitro procedure was used for determination of virucidal activity.

MATERIALS AND METHODS

Substance tested

Manorapid Synergy was supplied by Antiseptica chem.-pharm.Prod.GmbH (Pulheim-Brauweiler, Germany) as a preparation VP-100/33A. It is a transparent colorless solution with pH 3.5.

Virus

Bovine rotavirus (Negovan strain) [BRV], supplied by the collection of the National Diagnostic Research Veterinary Institute, Sofia, Bulgaria, was cultivated in MDBK cell line [Madin-Darbi bovine kidney cells] (maintenance solution DMEM Gibco BRL, Paisley, Scotland, UK, containing trypsin 3 μg/ml, penicillin 100 U/ml, and streptomycin, 100 μg/ml); infectious titer $10^{6.5}$ $CCID_{50}$/ml.

Cells and Media

MDBK cells (Madin-Darbi bovine kidney cells (National Bank for Industrial Microorganisms and Cell Cultures, No. NBIMCC-1031, Sofia, Bulgaria) were grown in Costar plastic vessels (USA) in medium containing 10% heated calf serum in DMEM (Gibco BRL, Scotland, UK), supplemented with 10 mmol/l HEPES buffer (Gibco BRL, Scotland, UK) and antibiotics (penicillin, 100 U/ml, streptomycin, 100 μg/ml).