
Note

Evaluation of the Antiviral Activity of Chlorine Dioxide and Sodium Hypochlorite against Feline Calicivirus, Human Influenza Virus, Measles Virus, Canine Distemper Virus, Human Herpesvirus, Human Adenovirus, Canine Adenovirus and Canine Parvovirus

**TAKESHI SANEKATA^{1*}, TOSHIAKI FUKUDA², TAKANORI MIURA²,
HIROFUMI MORINO², CHEOLSUNG LEE², KEN MAEDA³, KAZUKO ARAKI⁴,
TORU OTAKE⁵, TAKUYA KAWAHATA⁵, AND TAKASHI SHIBATA²**

¹Laboratory of Veterinary Infectious Disease, Faculty of Agriculture, Tottori University, 4-101 Koyama, Tottori 680-8553, Japan, ²Taiko Pharmaceutical Co., Ltd., 3-34-14 Uchihonmachi, Suita 564-0032, Japan, ³Department of Veterinary Medicine, Faculty of Agriculture, Yamaguchi University, 1677-1 Yoshida, Yamaguchi 753-8515, Japan, ⁴Infectious Disease Surveillance Center, National Institute of Infectious Disease, 1-23-1 Toyama, Shinjuku, Tokyo 162-8640, Japan, and ⁵Division of virology, Department of infectious diseases, Osaka Prefectural Institute of Public Health, 1-3-69 Nakamichi, Higashinari-ku, Osaka 573-0025, Japan

Received 15 June, 2009/Accepted 29 December, 2009

We evaluated the antiviral activity of a chlorine dioxide gas solution (CD) and sodium hypochlorite (SH) against feline calicivirus, human influenza virus, measles virus, canine distemper virus, human herpesvirus, human adenovirus, canine adenovirus and canine parvovirus. CD at concentrations ranging from 1 to 100 ppm produced potent antiviral activity, inactivating $\geq 99.9\%$ of the viruses with a 15 sec treatment for sensitization. The antiviral activity of CD was approximately 10 times higher than that of SH.

Key words : Virus inactivation / Antiviral activity / Chlorine dioxide / Sodium hypochlorite.