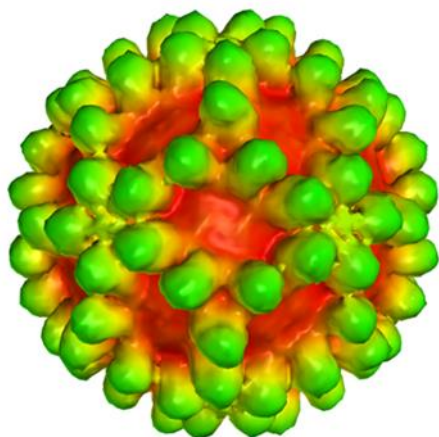




CTBT

Centre for Transfer of
Biomedical Technology

TECHNOLOGY SUMMARY



Technology owner
University Hospital
Hradec Králové
Czech Republic

Inventor (s)
Aneta Marková
Ondřej Soukup, Ph.D.
Jan Marek, Ph.D.
Michaela Hympánová

IPR status
confidential

Stage of Development
certified tests according
to EN standards

Contact
Lucie Bartosova, PhD.
lucie.bartosova@fnhk.cz
+420 727 802 314

NEW DISINFECTANT QASc

Background

Currently, the incidence of bacteria resistance to antimicrobial agents such as antibiotics, but also commonly used disinfectants, becomes an issue in the field of disinfection. In many cases, multidrug-resistant strains to both groups of anti-infectives compounds were described. This trend results from the long-term use of antibiotics and disinfectants, especially in hospitals where bacteria are constantly exposed to the selection pressure of antibiotics and thus the bacteria are able to develop resistance to antimicrobials due to evolutionary mechanism.

Description of the Invention

We have prepared completely new substances with a broad-spectrum effect: high antimicrobial potential against bacteria (EN 13727 + A2), mycobacteria (EN 14348), fungi (EN 13624) and enveloped viruses (EN 14476 + A2). Substance is significantly effective even at very low concentration.

Results for 0,06 % concentration:

	clean conditions		dirty conditions	
	1	5	1	5
contact time (min)				
EN 13727 + A2	+	+	+	+
EN 13624 (levurocidal effect)	+	+	+	+
EN 14476 + A2	+	+	-	+

	clean conditions
	contact time (min)
EN 14348	+

Advantages

Effective at low concentration (0,06 %):

- low production costs
- low allergy potential
- friendly to surfaces
- waste-water friendly

Potential Applications

- healthcare
- agriculture
- food industry