



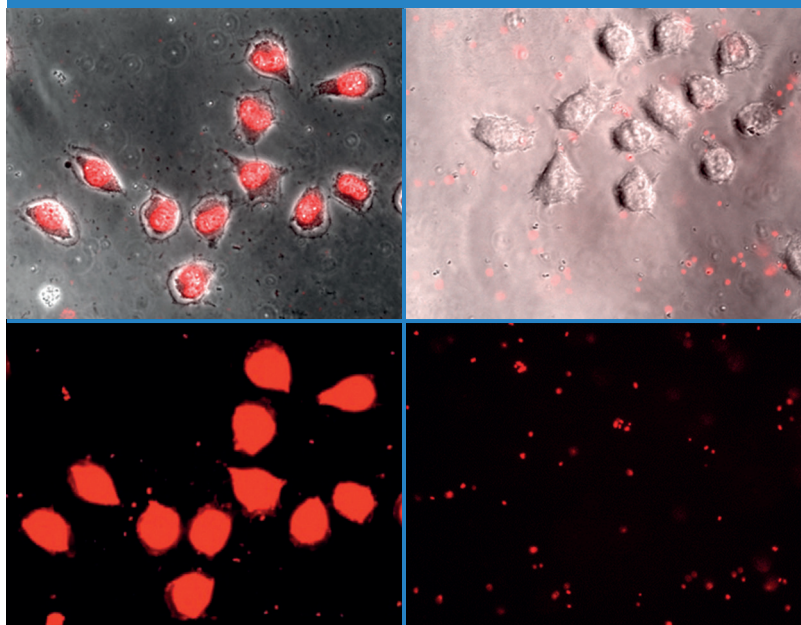
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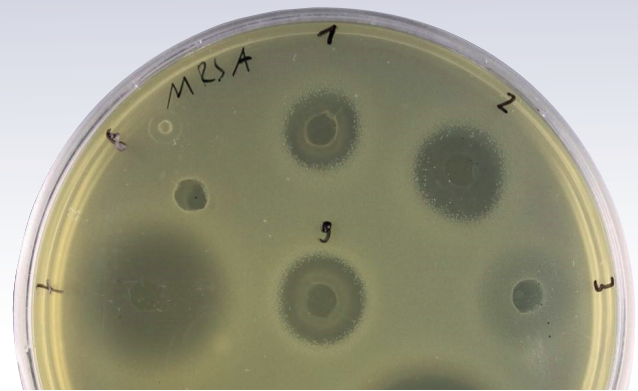
## ANTIMICROBIAL PEPTIDES – AMPs



Alternatives to antibiotics in  
medicinal products and for reduction  
of germ-infested surfaces



1



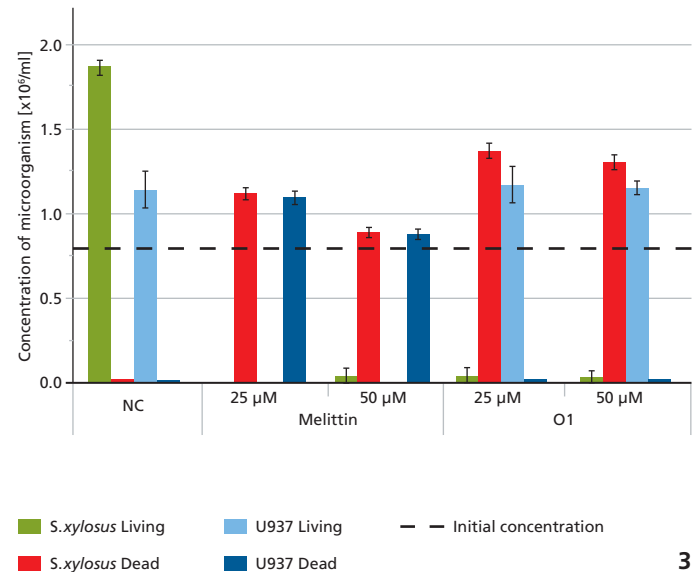
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## PROPERTIES OF PATENTED AMPs

- No cytotoxicity compared to natural AMPs
- Short peptide sequences < 15 amino acids
- Central hydrophobic area tailed by cationic regions
- Stretched  $\beta$ -sheet
- Very low minimum inhibitory concentrations (MIC)

## APPLICATIONS OF FRAUNHOFER IZI-BB's AMPs

- Alternative of antibiotics in medicinal products
- Alternative of metal ions in medicinal products
- Reduction of germ load on surfaces in food industry
- Reduction of biofilm development on germ-infested surfaces



3

- 1 Silicon liner of milking equipment, coated with patented AMP (O1)
- 2 Inhibition test against MRSA with different AMPs and antibiotics
- 3 Human and bacterial cells treated with natural occurring AMP (Melittin) versus patented AMP (O1)