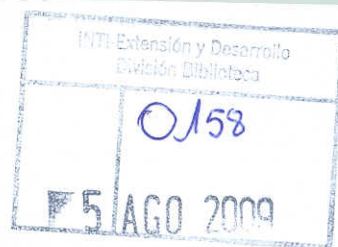


July 2009 • Volume 75 • Number 14



APPLIED AND ENVIRONMENTAL MICROBIOLOGY



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APPLIED AND ENVIRONMENTAL MICROBIOLOGY /FOR NONMEMBERS/
2009 VOLUME :75 ISSUE :14

SISAC



0099-2240(20090701)75:14;1-0



published twice monthly by



AMERICAN
SOCIETY FOR
MICROBIOLOGY

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Cover photograph (Copyright © 2009, American Society for Microbiology. All Rights Reserved.): Transmission electron microscopic (TEM) image of *Lactococcus lactis* genetically engineered to accumulate poly[(R)-3-hydroxybutyrate] (PHB) inclusions. While many bacteria naturally produce PHB granules for energy and carbon storage, *L. lactis* does not. As it is also a gram-positive bacterium, it is a suitable host for the recombinant production of PHB with the aim of generating endotoxin-free functionalized bionanobeads. *L. lactis* NZ9000 was transformed with plasmid pNZ-CAB, harboring the codon-optimized trio of genes required to convert acetyl coenzyme A into PHB, and cultivated for 24 h to yield the PHB granules shown in the TEM image. Image taken at the Manawatu Microscopy & Imaging Centre. (See related article on page 4668.)

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