



July 2013  
Volume 195  
Number 14  
Published Twice Monthly



AMERICAN  
SOCIETY FOR  
MICROBIOLOGY

**JB**  
Journal of Bacteriology

## TABLE OF CONTENTS

### ARTICLES

Eep Confers Lysozyme Resistance to <i>Enterococcus faecalis</i> via the Activation of the Extracytoplasmic Function Sigma Factor SigV	Sriram Varahan, Vijayalakshmi S. Iyer, William T. Moore, Lynn E. Hancock	3125–3134
The Activity of $\sigma^V$ , an Extracytoplasmic Function $\sigma$ Factor of <i>Bacillus subtilis</i> , Is Controlled by Regulated Proteolysis of the Anti- $\sigma$ Factor RsiV	Jessica L. Hastie, Kyle B. Williams, Craig D. Ellermeier	3135–3144
Analysis of Two Polyhydroxyalkanoate Synthases in <i>Bradyrhizobium japonicum</i> USDA 110	J. Ignacio Quelas, Elías J. Mongiardini, Julieta Pérez-Giménez, Gustavo Parisi, Aníbal R. Lodeiro	3145–3155
The Multifunctional Protein YdiV Represses P Fimbria-Mediated Adherence in Uropathogenic <i>Escherichia coli</i>	Rachel R. Spurbeck, Christopher J. Alteri, Stephanie D. Himpel, Harry L. T. Mobley	3156–3164
Identification and Characterization of Type II Toxin-Antitoxin Systems in the Opportunistic Pathogen <i>Acinetobacter baumannii</i>	Milda Jurénaitė, Arvydas Markuckas, Edita Sužiedėlienė	3165–3172
HipA-Triggered Growth Arrest and $\beta$ -Lactam Tolerance in <i>Escherichia coli</i> Are Mediated by RelA-Dependent ppGpp Synthesis	Gregory Bokinsky, Edward E. K. Baidoo, Swetha Akella, Helcio Burd, Daniel Weaver, Jorge Alonso-Gutierrez, Héctor García-Martín, Taek Soon Lee, Jay D. Keasling	3173–3182
The Endosymbiont <i>Amoebophilus asiaticus</i> Encodes an S-Adenosylmethionine Carrier That Compensates for Its Missing Methylation Cycle	Ilka Haferkamp, Thomas Penz, Melanie Geier, Michelle Ast, Tanja Mushak, Matthias Horn, Stephan Schmitz-Esser	3183–3192
Cyclohexanecarboxyl-Coenzyme A (CoA) and Cyclohex-1-ene-1-Carboxyl-CoA Dehydrogenases, Two Enzymes Involved in the Fermentation of Benzoate and Crotonate in <i>Syntrophus aciditrophicus</i>	Johannes W. Kung, Jana Seifert, Martin von Bergen, Matthias Boll	3193–3200
<i>Flavobacterium johnsoniae</i> GldK, GldL, GldM, and SprA Are Required for Secretion of the Cell Surface Gliding Motility Adhesins SprB and RemA	Abhishek Shrivastava, Joseph J. Johnston, Jessica M. van Baaren, Mark J. McBride	3201–3212
Poly(3-Hydroxybutyrate) Degradation in <i>Ralstonia eutropha</i> H16 Is Mediated Stereoselectively to (S)-3-Hydroxybutyryl Coenzyme A (CoA) via Crotonyl-CoA	Jessica Eggers, Alexander Steinbüchel	3213–3223
Temporal Expression Program of Quorum Sensing-Based Transcription Regulation in <i>Sinorhizobium meliloti</i>	Pornsri Charoenpanich, Stefan Meyer, Anke Becker, Matthew McIntosh	3224–3236
Regulation of the Swarming Inhibitor <i>disA</i> in <i>Proteus mirabilis</i>	Bree A. Szostek, Philip N. Rather	3237–3243
Production of the Cannibalism Toxin SDP Is a Multistep Process That Requires SdpA and SdpB	Tiara G. Pérez Morales, Theresa D. Ho, Wei-Ting Liu, Pieter C. Dorrestein, Craig D. Ellermeier	3244–3251
Dual Orientation of the Outer Membrane Lipoprotein P6 of Nontypeable <i>Haemophilus influenzae</i>	Lea Vacca Michel, Joy Snyder, Rachel Schmidt, Jennifer Milillo, Kyle Grimaldi, Breanna Kalmeta, M. Nadeem Khan, Sharad Sharma, Leslie Kate Wright, Michael E. Pichichero	3252–3259
Fe(II) Oxidation Is an Innate Capability of Nitrate-Reducing Bacteria That Involves Abiotic and Biotic Reactions	Hans K. Carlson, Iain C. Clark, Steven J. Blazewicz, Anthony T. Iavarone, John D. Coates	3260–3268

Continued on following page

**Refining the Plasmid-Encoded Type IV Secretion System Substrate Repertoire of *Coxiella burnetii***

3269–3276

**Structural Basis for Biofilm Formation via the *Vibrio cholerae* Matrix Protein RbmA**

3277–3286

**Identification of Regions Important for Resistance and Signalling within the Antimicrobial Peptide Transporter BceAB of *Bacillus subtilis***

Pauline Maturana, Joseph G. Graham,  
Uma M. Sharma, Daniel E. Voth

3287–3297

Krista M. Giglio, Jiunn C. Fong, Fitnat  
H. Yildiz, Holger Sondermann

Felix Kallenberg, Sebastian Dintner,  
Roland Schmitz, Susanne Gebhard

**AUTHOR'S CORRECTION**

**Characterization of a *Vibrio fischeri* Aminopeptidase and Evidence for Its Influence on an Early Stage of Squid Colonization**

Pat M. Fidopiastis, Bethany A. Rader,  
David G. Gerling, Nestor A. Gutierrez,  
Katherine H. Watkins, Michelle West  
Frey, Spencer V. Nyholm, Cheryl A.  
Whistler

3298