

Letter to the Editor

¹H, ¹³C, and ¹⁵N backbone resonance assignments for PSE-4, a 29.5 kDa class A β-lactamase from *Pseudomonas aeruginosa*
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β-lactamases are implicated in antibiotic resistance, particularly class A β-lactamases like PSE-4. These proteins allow bacteria to resist β-lactam antibiotics which are designed to prevent growth by inhibiting peptidoglycan synthesis (Matagne et al., 1999). While their mechanism is still controversial, it is essential to get in-depth characterizations in order to develop new inhibitors and antibiotics. PSE-4, the model for carbenicillinases, is an especially interesting target for NMR characterization as it gives rise to spectra of very high quality despite its 271 residues. Moreover, its crystal structure (Lim et al., 2001) will be valuable for the interpretation of the relaxation data that soon will follow. Here we report the backbone resonance assignments for PSE-4. The TROSY versions of several 3D heteronuclear experiments were used, and more than 98% of all backbone nuclei (including C_β) have been assigned. Backbone ¹H, ¹³C and ¹⁵N resonances have been deposited in the BMRB (Accession Number 6838).

References: Matagne et al. (1999) *Nat. Prod. Rep.*, **16**, 1–19; Lim et al. (2001) *Biochemistry*, **40**, 395–402.

Sébastien Morin^a, Roger C. Levesque^b & Stéphane M. Gagné^{a,*}

^a*Département de Biochimie et de Microbiologie and CREFSIP, Faculté des Sciences et de Génie, Université Laval, Québec, G1K 7P4, Canada;* ^b *Département de Microbiologie and CREFSIP, Faculté de Médecine, Université Laval, Québec, G1K 7P4, Canada*

*To whom correspondence should be addressed. E-mail: smg@rsvs.ulaval.ca

Supplementary material is available in electronic format at <http://dx.dio.org/s10858-005-5343-7/10858-005-5343-7>.