

1 **BIOLOGICAL NANOPORES AS GATES FOR DRUG TRANSPORT**

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5 Biological nanopores, such as pore-forming toxins and bacterial porins, are
6 increasingly being explored as tools for DNA sequencing, biosensing, and nanotherapy.
7 Bacterial porins, for example, are often used as key gates for the entrance of antibiotics
8 into bacteria, as they naturally permit a controlled diffusion of nutrients into these
9 cells.

10 Maltoporin LamB from *Escherichia coli* has been investigated in this study as a
11 potential gate for a Trojan Horse sugar-conjugate. Confocal microscopy images of
12 LamB-reconstituted planar bilayers reveal a specific substrate-porin interaction, being
13 this the first step in the translocation of substrates.

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15 ***References***

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