

Functional characterization of a gene cluster responsible for inositol catabolism associated with hospital-adapted isolates of *Enterococcus faecium*

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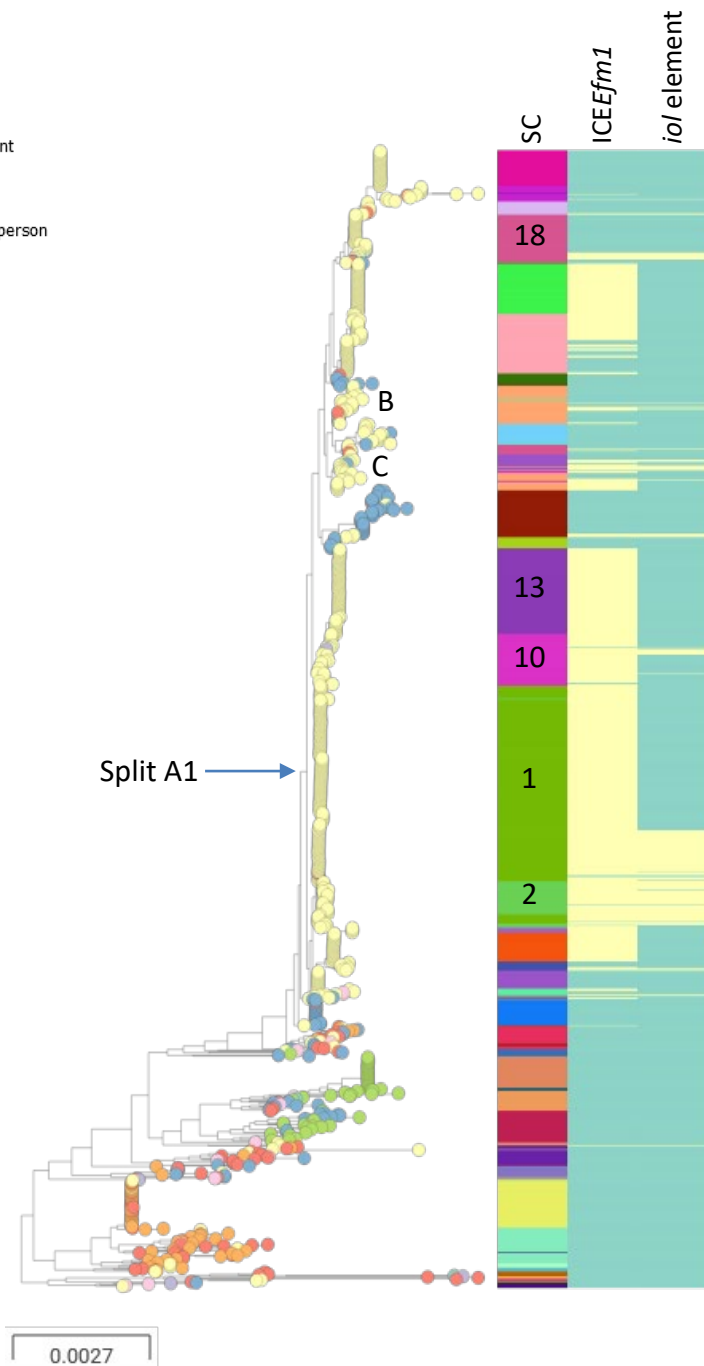
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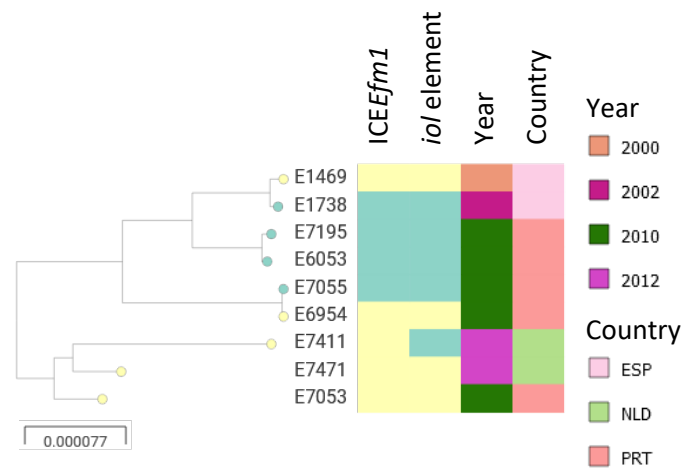
Source



SC



B



C



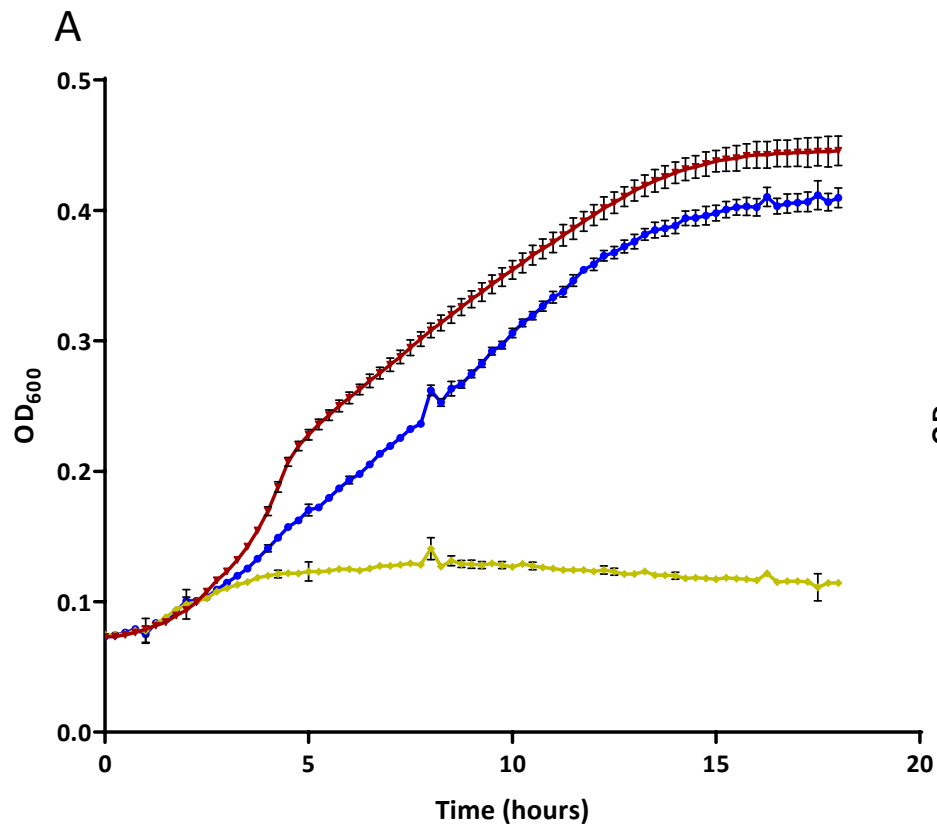
Bacillus subtilis



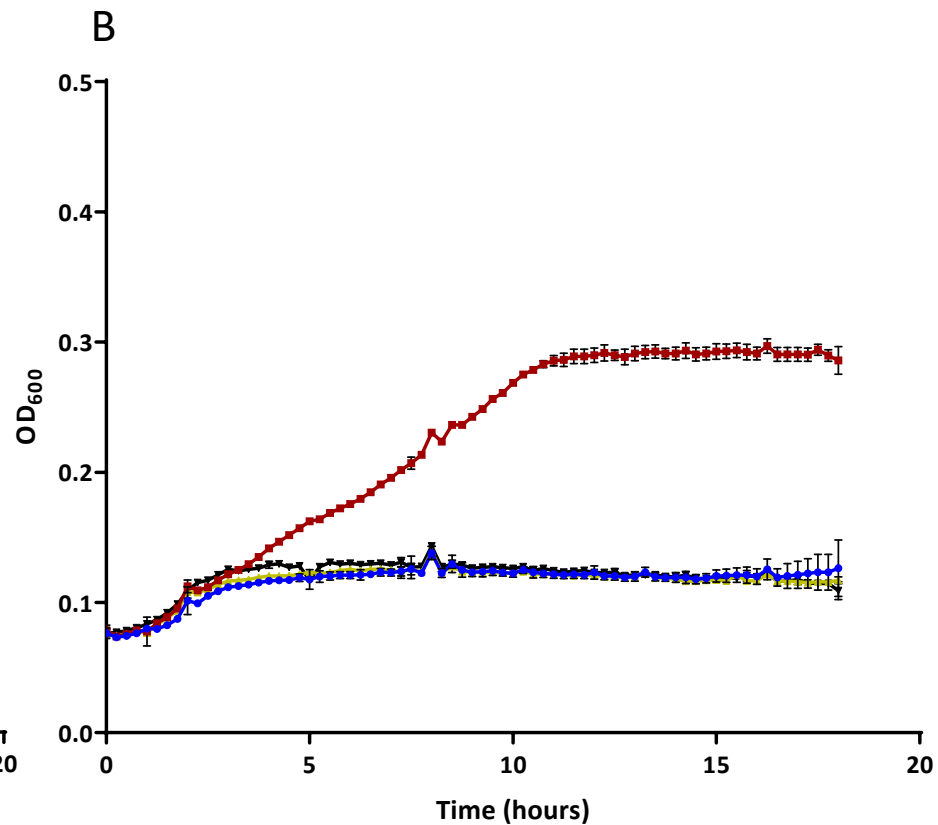
Enterococcus faecium



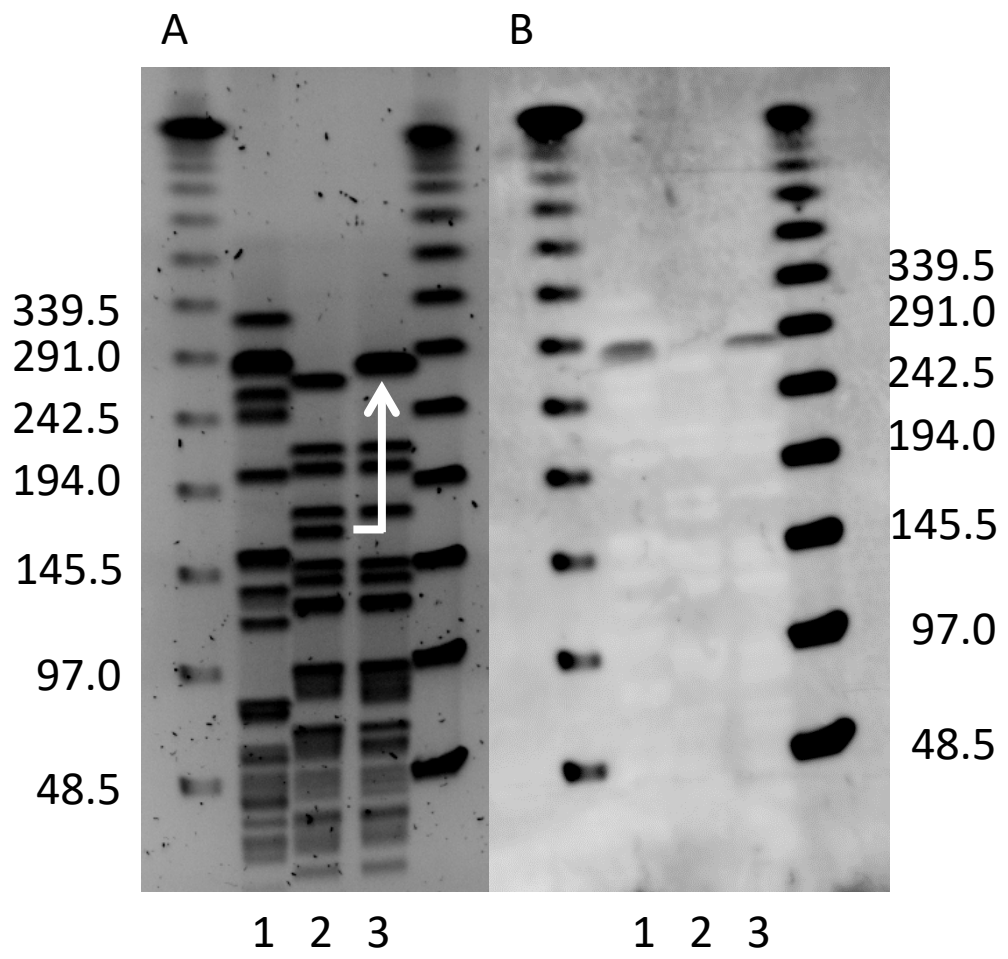
Protein/ enzyme	Function	inositol encoding genes
<i>ioA</i>	malonic semialdehyde dehydrogenase	
<i>ioB</i>	5-deoxy-glucuronate isomerase	
<i>ioC</i>	5-dehydro-2-deoxygluconokinase	
<i>ioD</i>	THcHDO hydrolase	
<i>ioE</i>	2-keto-MI dehydratase	
<i>ioF</i>	minor inositol transporter	
<i>ioG</i>	inositol dehydrogenase	
<i>ioH</i>	function unknown	
<i>ioI</i>	2-keto-myo-inositol isomerase	
<i>ioJ</i>	6-phospho-5-dehydro-2-deoxy-D-gluconate aldolase	
<i>ioR</i>	transcriptional repressor	
<i>ioT</i>	major inositol transporter	

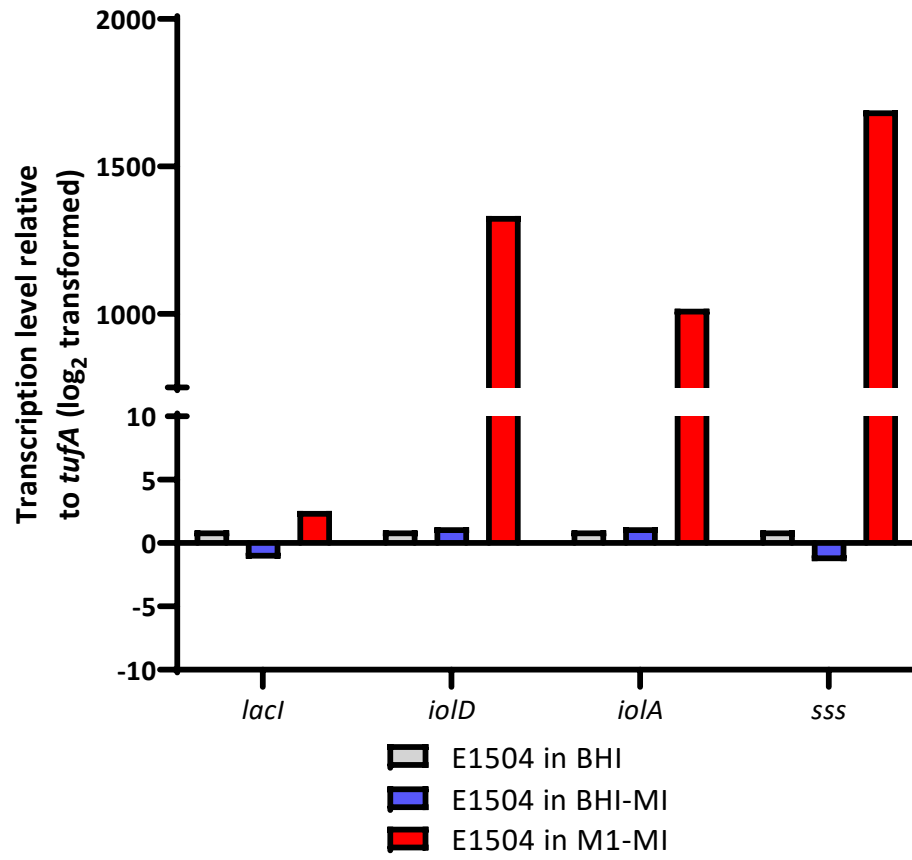


- E1679 (donor) in M1-MI
- E4658 (recipient) in M1-MI
- E7855 (transconjugant) in M1-MI



- E1504 (WT) in M1
- E1504 (WT) in M1-MI
- E1504 (WT) in M1-DCl
- E1504Δ*ioiD* in M1-MI





Stop *lacI*



tagaagcgtgaatcatgctgtaaggcgattcacgccttttttcgttatttttaattaacacgcaaatatcggtgtaa

aataaattattgccagcttggtttcagcgtgctatacttgcctc**A**gaaatagaagaacgaatgaagaggtgggtat**atg**

-35

-10

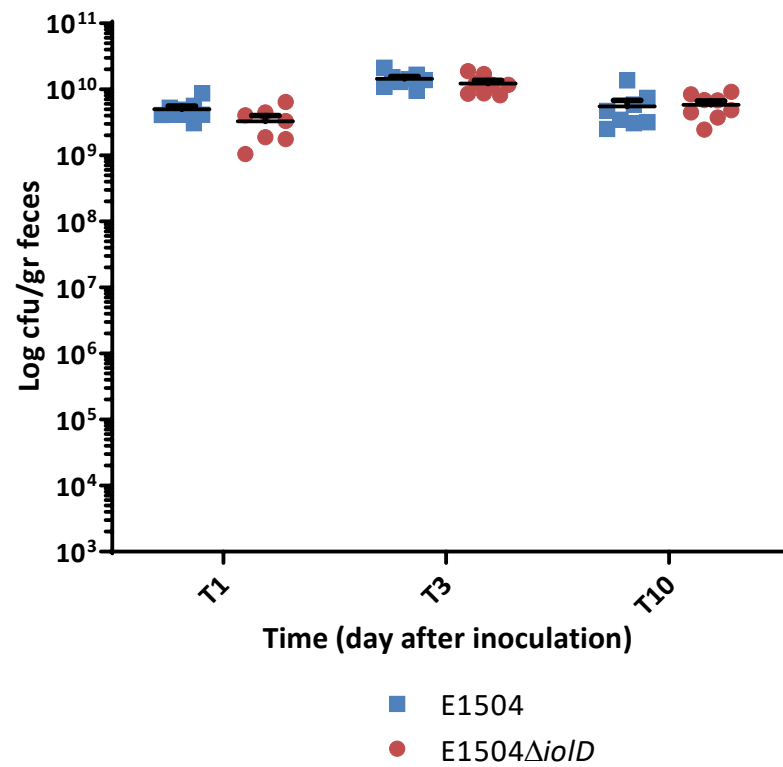


Transcription start



Start *iolC*

A



B

