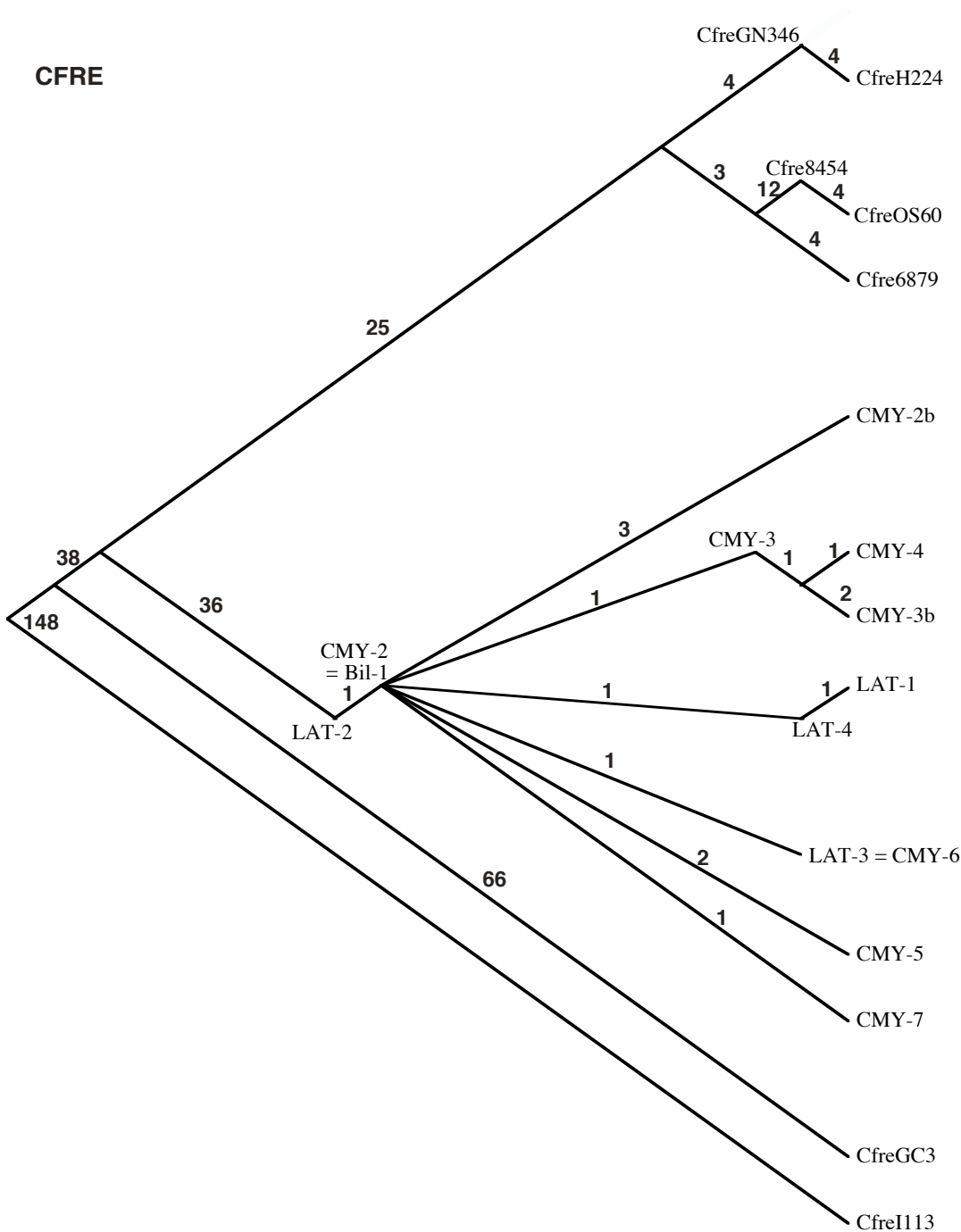
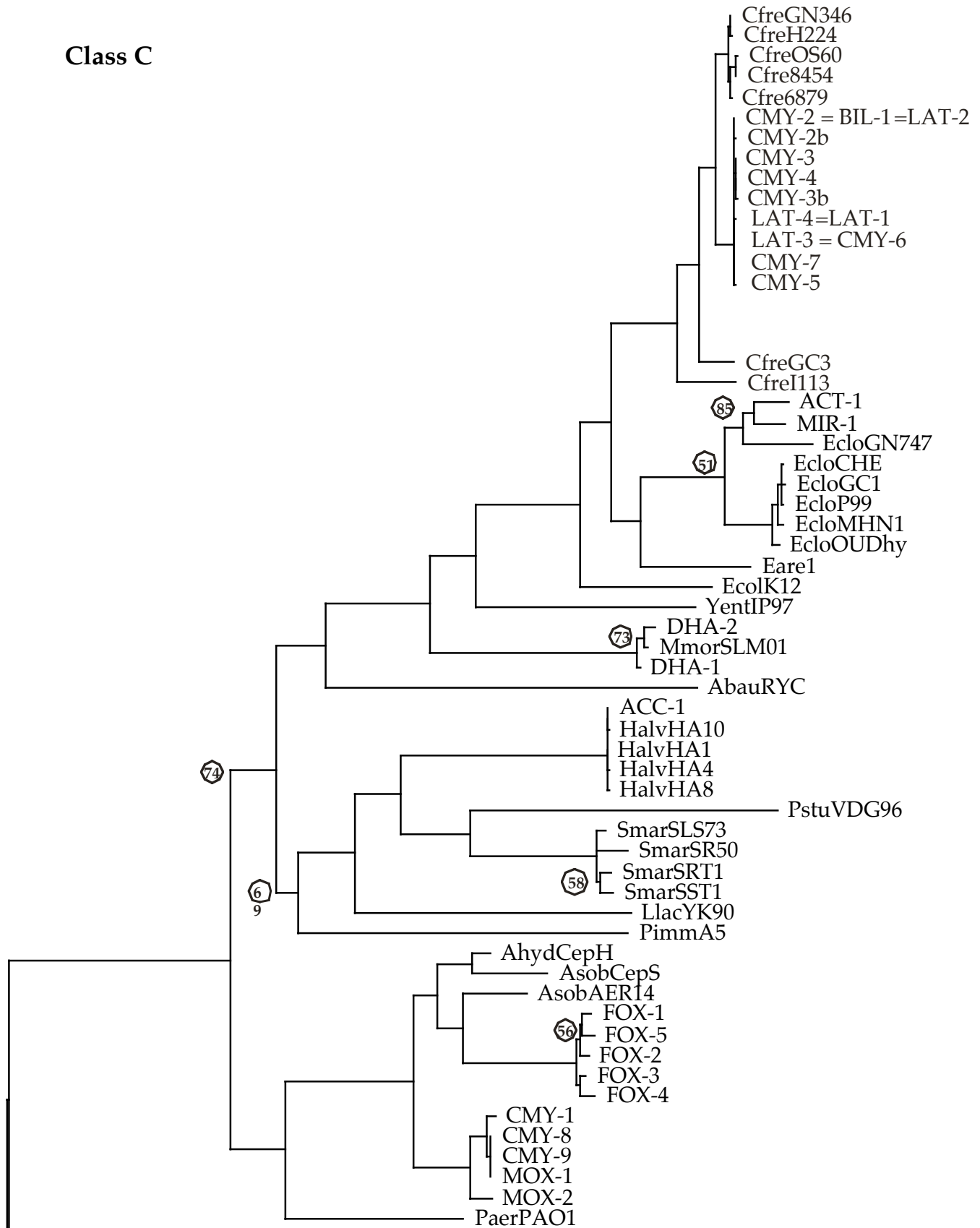


Class C β -lactamases phylogeny

The scale of the Class C β -lactamases phylogeny makes it impossible to visualize the detail of the β -lactamases from *Citrobacter freundii* (CFRE). Those gene recently moved onto plasmids and have diversified, albeit only slightly, from each other. This document therefore includes both the phylogeny of the Class C β -lactamases, and a separate, detailed phylogeny of the CFRE clade within the Class C β -lactamases.



Class C



Oant82116
Oant217I

— 62 Substitutions

○ Clades with probabilities less than 90%

Barlow, M. and B.G. Hall. 2002. Origins and evolution of the *ampC* β -lactamases of *Citrobacter freundii*. *Antimicrob. Agents Chemother.* **46**: 1190-1198.

** symbol indicates that sequence was corrected from published sequence

Symbol on Phylogram (Nucleotide)	Accession Number	Plasmid or Chromosome	Organism, if on Chromosome
AbauRYC	AJ009979	Chromosome	<i>Acinetobacter baumannii</i>
ACC-1	AJ133121	Plasmid	
ACT-1	U58495	Plasmid	
AsobAER14	U10250	Chromosome	<i>Aeromonas sobria</i>
AsobCepS	X80277	Chromosome	<i>Aeromonas sobria</i>
Bil-1	X74512**	Plasmid	
Cfre6879	Not yet	Chromosome	<i>Citrobacter freundii</i>
Cfre8454	Not yet	Chromosome	<i>Citrobacter freundii</i>
CfreGC3	D85910	Chromosome	<i>Citrobacter freundii</i>
CfreGN346	D13207	Chromosome	<i>Citrobacter freundii</i>
CfreH224	Y15129	Chromosome	<i>Citrobacter freundii</i>
CfreI113	X76636	Chromosome	<i>Citrobacter freundii</i>
CfreOS60	X03866	Chromosome	<i>Citrobacter freundii</i>
CMY-1	X92508	Plasmid	
CMY-2	X91840	Plasmid	
CMY-2b	U77414	Plasmid	
CMY-3	Y16783	Plasmid	
CMY-3b	None	Chromosome	<i>Proteus mirabilis</i>
CMY-4	Y16785	Plasmid	
CMY-5	Y17716	Plasmid	
CMY-6	AJ011293	Plasmid	
CMY-7	AJ011291	Plasmid	
CMY-8	AF167990	Plasmid	
CMY-9	AB049588	????	<i>Escherichia coli</i>
DHA-1	Y16410	Plasmid	
DHA-2	AF259520	Plasmid	
Eare1	AF211348	Chromosome	<i>Enterobacter aerogenes</i>
EcloCHE	AJ278994	Chromosome	<i>Enterobacter cloacae</i>
EcloGC1	D44479	Chromosome	<i>Enterobacter cloacae</i>
EcloGN747	AB016611	Chromosome	<i>Enterobacter cloacae</i>
EcloMHN1	X08082	Chromosome	<i>Enterobacter cloacae</i>
EcloODh	AJ278995	Chromosome	<i>Enterobacter cloacae</i>
EcloP99	X07274	Chromosome	<i>Enterobacter cloacae</i>
EcolK12	AE000487	Chromosome	<i>Escherichia coli</i> K12
Fox-1	X77455	Plasmid	
FOX-2	Y10282	Plasmid	
FOX-3	Y11068	Plasmid	
FOX-4	AJ277535	Plasmid	
FOX-5	AY007369	Plasmid	

HalvHA1	AF180953	Chromosome	Hafnia alvei
HalvHA10	AF180961	Chromosome	Hafnia alvei
HalvHA4	AF180955	Chromosome	Hafnia alvei
HalvHA8	AF180959	Chromosome	Hafnia alvei
Lat-1	X78117**	Plasmid	
Lat-2	X97039**	Plasmid	
Lat-3	Y15411**	Plasmid	
Lat-4	Y15412**	Plasmid	
LlacYK90	X56660	Chromosome	Lysobacter lactamgenus
MIR-1	M37839	Plasmid	
MmorSLM01	Y10283	Chromosome	Morganella morganii
MOX-1	D13304	Plasmid	
MOX-2	AJ276453	Plasmid	
Oant217I	AJ299421	Chromosome	Ochrobactrum anthropi
Oant82116	AJ295342	Chromosome	Ochrobactrum anthropi
PaerPAO1	AE004827	Chromosome	Pseudomonas aeruginosa
PimmA5	X83586	Chromosome	Psychrobacter immobilis
PstuVDG96	Y17315	Chromosome	Providencia stuartii
SmarSLS73	AJ271368	Chromosome	Serratia marcescens
SmarSR50	X52964	Chromosome	Serratia marcescens
SmarSRT1	AB008454	Chromosome	Serratia marcescens
SmarSST1	AB008455	Chromosome	Serratia marcescens
YentIP97	X63149	Chromosome	Yersinia enterocolitica