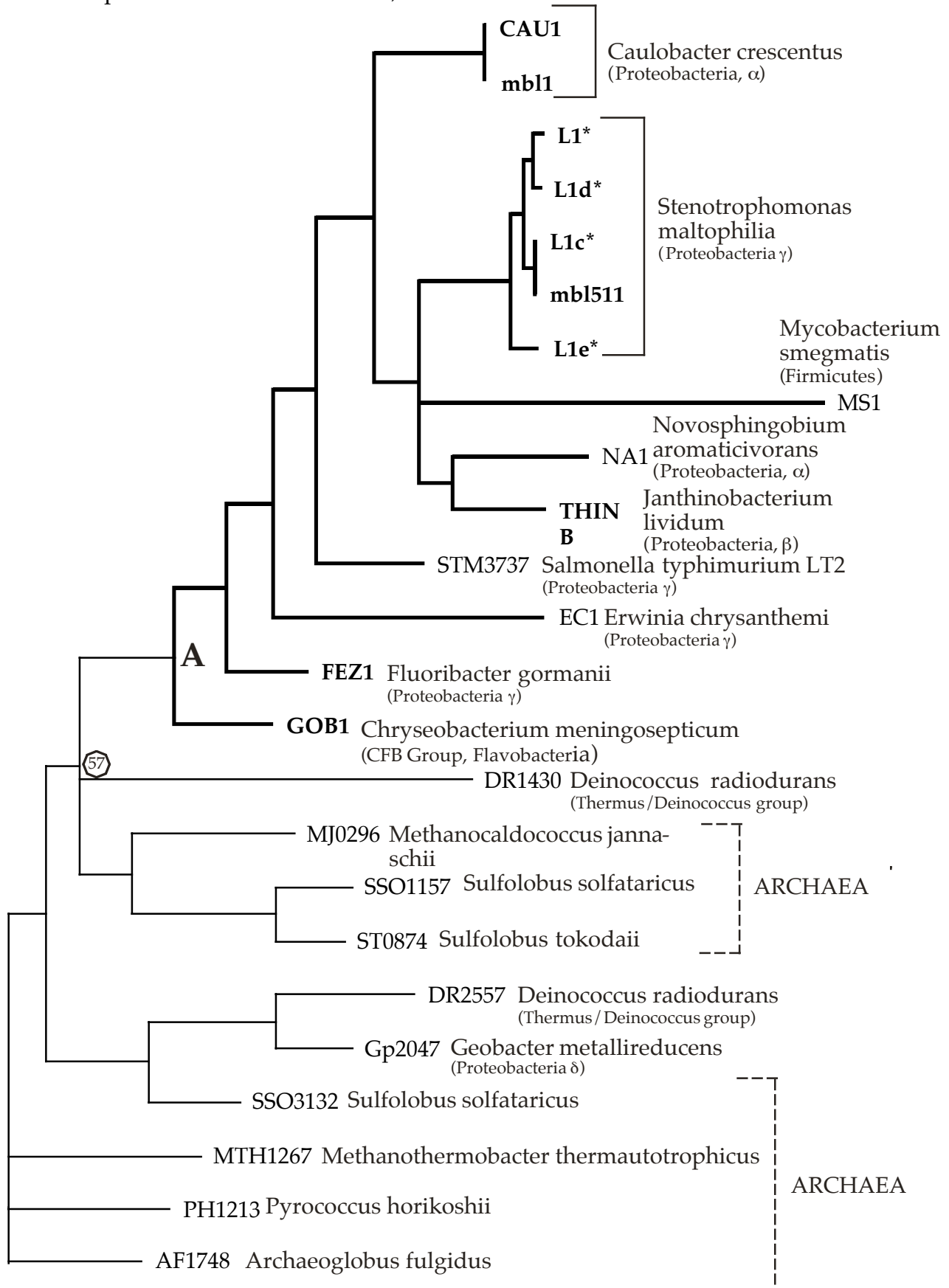


# Class E metallo $\beta$ -lactamases

These correspond to the Ambler Class B, Subclasses B3



— 116 nucleotide substitutions or 0.1 changes  
 ○ indicates the confidence on a clade where that confidence is < 80%

Thick lines and boldface names indicate experimentally determined metallo- $\beta$ -lactamase function. Thin lines and lightface names indicate homologs not known to have metallo- $\beta$ -lactamase function. Node A indicates the origin of functional metallo- $\beta$ -lactamase, i.e. those enzymes that hydrolyze  $\beta$ -lactam antibiotics

Hall, B.G., S. Salipante and M. Barlow. 2004. Independent origins of the Subgroup (B1 + B2) and the Subgroup B3 metallo- $\beta$ -lactamases. *J. Mol. Evol.* **59**: 132-140.

AF0234	Archaeoglobus fulgidus	NC_000917	Archaea; Euryarchaeota
AF1748	Archaeoglobus fulgidus	NC_000917	Archaea; Euryarchaeota
CAU1	Caulobacter crescentus	AJ308331	Bacteria; Proteobacteria; alpha subdivision
DR1430	Deinococcus radiodurans	NC_001263	Bacteria; Thermus/Deinococcus group
DR2557	Deinococcus radiodurans	NC_001263	Bacteria; Thermus/Deinococcus group
EC1	Erwinia chrysanthemi	TIGR_198628	Bacteria; Proteobacteria; gamma subdivision
FEZ1	Fluoribacter gormanii	Y17896	Bacteria; Proteobacteria; gamma subdivision
GOB1	Chryseobacterium meningosepticum	AF090141	Bacteria; CFB group; Flavobacteria
Gp2047	Geobacter metallireducens	NZ_AAAS01000009	Bacteria; Proteobacteria; delta subdivision
L1	Stenotrophomonas maltophilia	X75074	Bacteria; Proteobacteria; gamma subdivision
L1c	Stenotrophomonas maltophilia	AJ251814	Bacteria; Proteobacteria; gamma subdivision
L1d	Stenotrophomonas maltophilia	AJ251815	Bacteria; Proteobacteria; gamma subdivision
L1e	Stenotrophomonas maltophilia	AJ272109	Bacteria; Proteobacteria; gamma subdivision
mbl1	Caulobacter crescentus	AJ315850	Bacteria; Proteobacteria; alpha subdivision

mbl511	Stenotrophomonas maltophilia	AJ289086	Bacteria; Proteobacteria; gamma subdivision
MJ0296	Methanocaldococcus jannaschii	NC_000909	Archaea; Euryarchaeota
MS1	Mycobacterium smegmatis	TIGR_1772	Bacteria; Firmicutes; Actinobacteria
MTH1267	Methanothermobacter thermautotrophicus str. Delta H.	AE000893	Archaea; Euryarchaeota
NA1	Novosphingobium aromaticivorans	NC_002719	Bacteria; Proteobacteria; alpha subdivision
PH1213	Pyrococcus horikoshii	NC_000961	Archaea; Euryarchaeota
SSO1157	Sulfolobus solfataricus	NC_002754	Archaea; Crenarchaeota
SSO3132	Sulfolobus solfataricus	NC_002754	Archaea; Crenarchaeota
ST0874	Sulfolobus tokodaii	NC_003106	Archaea; Crenarchaeota
STM3737	Salmonella enteridis serovar typhimurium LT2	NC_003197	Bacteria; Proteobacteria; gamma subdivision
THINB	Janthinobacterium lividum	AJ250876	Bacteria; Proteobacteria; beta subdivision