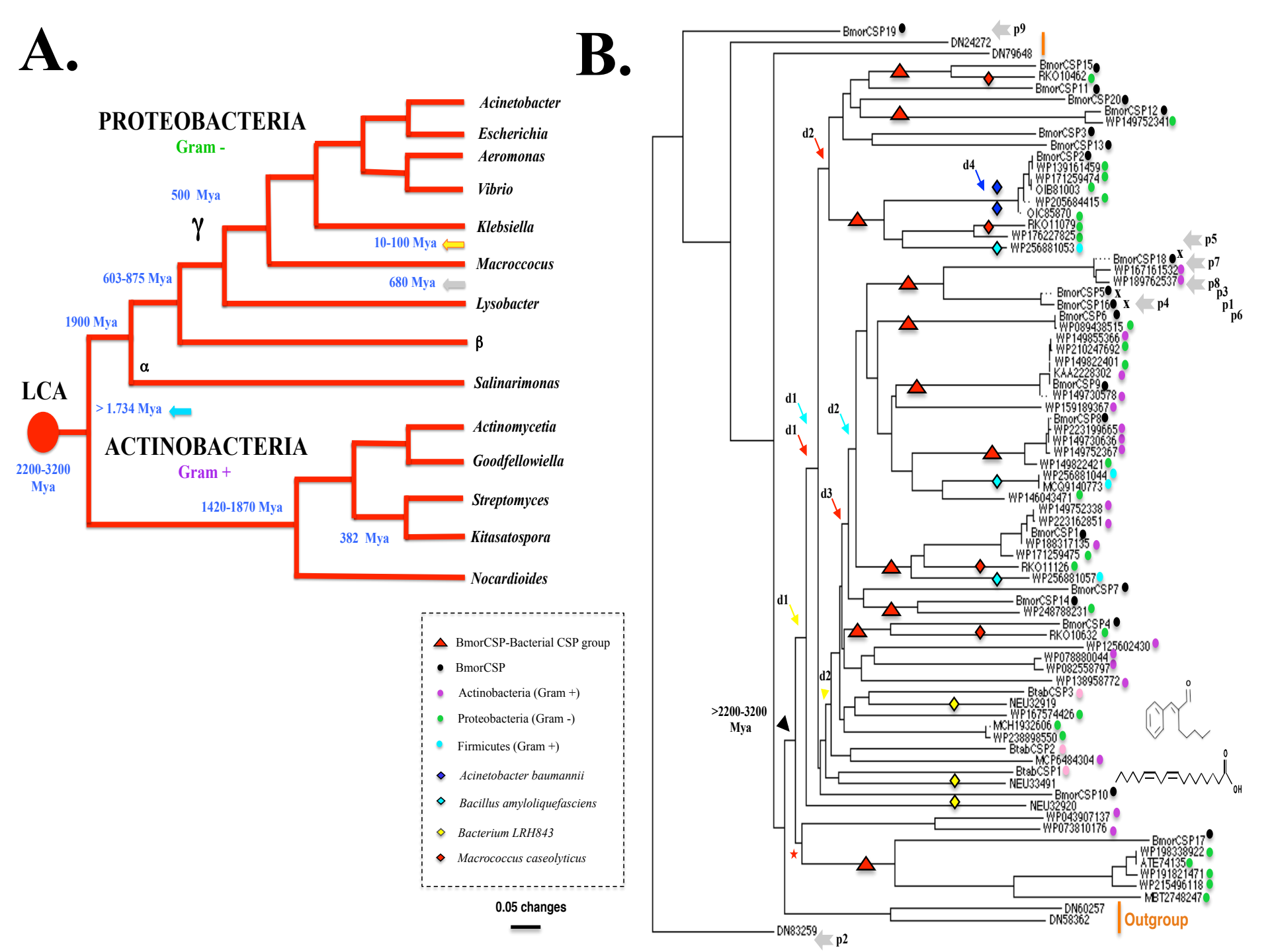
A.
PROTEOBACTERIA
Gram -
500 Mya
γ
603-875 Mya
1900 Mya
α
LCA
2200-3200 Mya
> 1.734 Mya
ACTINOBACTERIA
Gram +
1420-1870 Mya
382 Mya
10-100 Mya
680 Mya
Acinetobacter
Escherichia
Aeromonas
Vibrio
Klebsiella
Macroccocus
Lysobacter
β
Salinarimonas
Actinomycetia
Goodfellowiella
Streptomyces
Kitasatospora
Nocardioides
BmorCSP-Bacterial CSP group
BmorCSP
Actinobacteria (Gram +)
Proteobacteria (Gram -)
Firmicutes (Gram +)
Acinetobacter baumannii
Bacillus amyloliquefasciens
Bacterium LRH843
Macrococcus caseolyticus
0.05 changes
B.
BmorCSP19
DN24272
DN79648
p9
BmorCSP15
RKO10462
BmorCSP11
BmorCSP20
BmorCSP12
WP149752341
BmorCSP3
BmorCSP13
BmorCSP2
WP139161459
WP171259474
OIB81003
WP205684415
OIC85870
RKO11079
WP176227825
WP256881053
d2
d4
p5
BmorCSP18
WP167161532
WP189762537
p7
p8
p3
p1
p6
BmorCSP5
BmorCSP16
p4
BmorCSP6
WP089438515
WP149855366
WP210247692
WP149822401
KAA2228302
BmorCSP9
WP149730578
WP159189367
BmorCSP8
WP223199665
WP149730636
WP149752367
WP149822421
WP256881044
MCQ9140773
WP146043471
WP149752338
WP223162851
BmorCSP1
WP188317135
WP171259475
RKO11126
WP256881057
BmorCSP7
BmorCSP14
WP248788231
BmorCSP4
RKO10632
WP125602430
WP078880044
WP082558797
WP138958772
BtabCSP3
NEU32919
WP167574426
MCH1932606
WP238898550
BtabCSP2
MCP6484304
BtabCSP1
NEU33491
BmorCSP10
NEU32920
WP043907137
WP073810176
BmorCSP17
WP198338922
ATE74135
WP191821471
WP215496118
MBT2748247
DN60257
DN58362
Outgroup
DN83259
p2
d1
d3
>2200-3200 Mya
O
OH