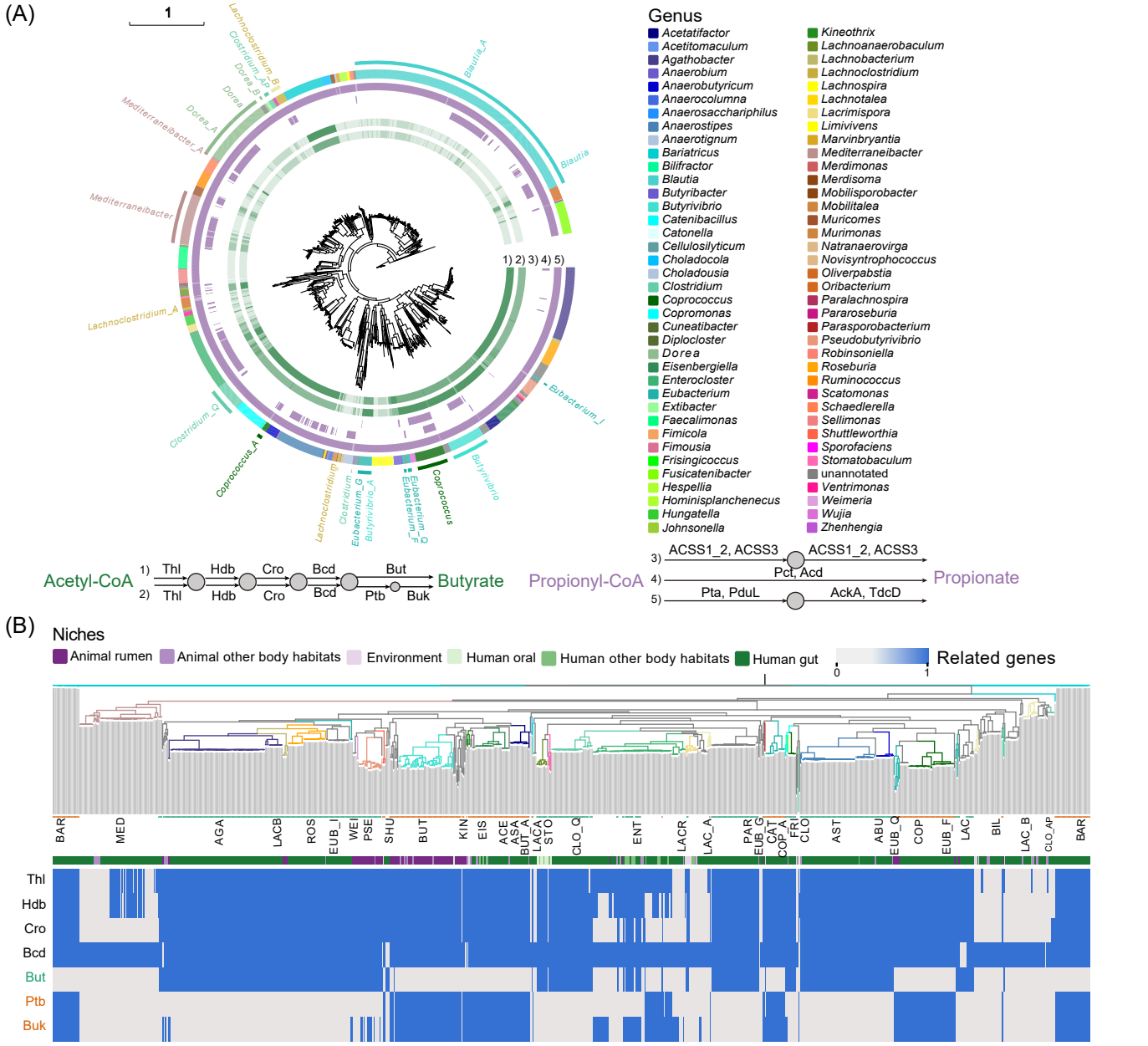
(A)
1
Lachnoclostridium_B
Clostridium_AP
Dorea_B
Dorea
Dorea_A
Mediterraneibacter_A
Mediterraneibacter
Lachnoclostridium_A
Clostridium_Q
Coprococcus_A
Lachnoclostridium
Clostridium
Eubacterium_G
Butyrivibrio_A
Eubacterium_F
Eubacterium_Q
Coprococcus
Butyrivibrio
Eubacterium_I
Blautia
Blautia_A
1) 2) 3) 4) 5)
Genus
Acetatifactor
Acetitomaculum
Agathobacter
Anaerobium
Anaerobutyricum
Anaerocolumna
Anaerosacchariphilus
Anaerostipes
Anaerotignum
Bariatricus
Bilifractor
Blautia
Butyribacter
Butyrivibrio
Catenibacillus
Catonella
Cellulosilyticum
Choladocola
Choladousia
Clostridium
Coprococcus
Copromonas
Cuneatibacter
Diplocloster
Dorea
Eisenbergiella
Enterocloster
Eubacterium
Extibacter
Faecalimonas
Fimicola
Fimousia
Frisingicoccus
Fusicatenibacter
Hespellia
Hominisplanchenecus
Hungatella
Johnsonella
Kineothrix
Lachnoanaerobaculum
Lachnobacterium
Lachnoclostridium
Lachnospira
Lachnotalea
Lacrimispora
Limivivens
Marvinbryantia
Mediterraneibacter
Merdimonas
Merdisoma
Mobilisporobacter
Mobilitalea
Muricomes
Murimonas
Natranaerovirga
Novisyntrophococcus
Oliverpabstia
Oribacterium
Paralachnospira
Pararoseburia
Parasporobacterium
Pseudobutyrivibrio
Robinsoniella
Roseburia
Ruminococcus
Scatomonas
Schaedlerella
Sellimonas
Shuttleworthia
Sporofaciens
Stomatobaculum
unannotated
Ventrimonas
Weimeria
Wujia
Zhenhengia
Acetyl-CoA
1) Thl Hdb Cro Bcd But
2) Thl Hdb Cro Bcd Ptb Buk
Butyrate
Propionyl-CoA
3) ACSS1_2, ACSS3 ACSS1_2, ACSS3
4) Pct, Acd
5) Pta, PduL AckA, TdcD
Propionate
(B)
Niches
Animal rumen
Animal other body habitats
Environment
Human oral
Human other body habitats
Human gut
0
1
Related genes
BAR MED AGA LACB ROS EUB_I WEI PSE SHU BUT KIN EIS ACE ASA BUT_A LACA STO CLO_Q ENT LACR LAC_A PAR EUB_G CAT COP_A FRI CLO AST ABU EUB_Q COP EUB_F LAC BIL LAC_B CLO_AP BAR
Thl
Hdb
Cro
Bcd
But
Ptb
Buk
(C)
polysaccharide
asukamycin
geobacillin I
Hungatella
Hominisplanchenecus
Clostridium
Novisyntrophococcus
herboxidiene
difficidin
siphonazole
S-layer glycan
lipoolisosaccharide
Anaerocolumna
Lacrimispora
zwittermicin A
pyxidicycline A / pyxidicycline
Sellimonas
Coprococcus
Diplocloster
polysaccharide B
lipopolysaccharide
Limivivens
Mobilitalea
chejuenolide A / chejuenolide
berninamycin A
kanamycin
N-octanoyl-Met-Phe-H
surfactin
Fusicatenibacter
Choladousia
thiazostatin / watasemycin A / watasemycin B / 2-hydroxyphenylthiazoline enantiopyrochelin / isopyochelin
yersiniabactin
Lachnoclostridium
Eubacterium
tridecaptin
Roseburia
Anaerostipes
Enterocloster
polyketomycin
nosiheptide
Kineothrix
Muricomes
Oliverpabstia
myxothiazol
Mediterraneibacter
Copromonas
xanthothricin
exopolysaccharide
nisin O
bacitracin
Anaerobutyricum
unannotated
Eisenbergiella
Bariatricus
equibactin
kalimantacin A
macrobrevin
dipeptide aldehydes
ruminococcin A
xantholipin
Choladocola
xenocoumacin 1 / xenocoumacin II
Sch-47554 / Sch-47555
Acetatifactor
Catonella
clostridiolysin S
TP-1161
Schaedlerella
Dorea
Faecalimonas
A40926
Cellulosilyticum
tyrocidine
ituain
Ventrimonas
Agathobacter
flavecins
capsular polysaccharide
Pseudobutyrivibrio
Blautia
anabaenopeptin NZ857 / nostamide A
bacillaene
Mediterraneibacter
Ruminococcus
Lachnotalea
Anaerosacchariphilus
pimaricin
carnolysin A1 / carnolysin A2
caerulomycin A
R1128
aurantinin B / aurantinin C / aurantinin D
locillomycin
thurincin H
closthioamide
nisin Q
emulsan
micacocidin
Butyrivibrio
Butyribacter
butyrivibriocin AR10
paramagnetoquinone 1 / paramagnetoquinone 2
(D)
Stage 0
Stage I
Stage II
Stage III
Stage IV
Stage V
Germination
Uncharacterized
1
2
region
abrB
parB
sepF
sigH
spoIIA
mcsA
sigE
sigK
spoIIGA
ftsQ
sigG
spoIIAB
spoIIAA
spoIIAH
dacF
sigA
spoIVB
spoIVA
sodA
spoVAD
spoVT
gpr
spmA
spmB
tepA
asrC
bilD
dnaA
pdp
purB
pii
tkrB
WabG
yabG
ybbP
ybbH
ylbT
zupT