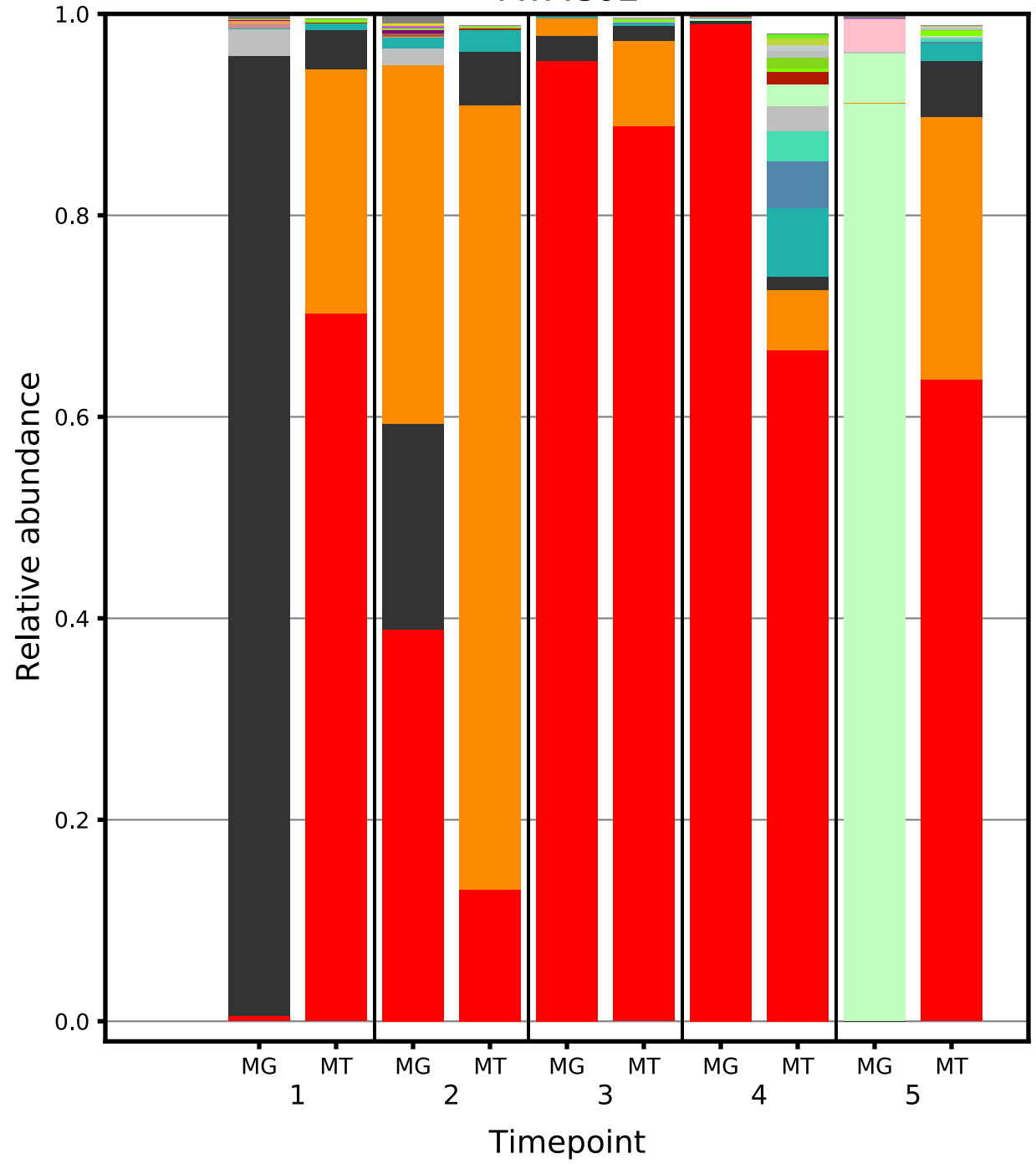


Supplementary File 1

Plots displaying the longitudinal taxonomic composition of the metagenome and metatranscriptome for each of the 39 subjects.

- Phylotype**
- Lactobacillus_crispatus
 - Lactobacillus_jensenii
 - Lactobacillus_iners
 - Bifidobacterium_breve
 - Gardnerella_vaginalis
 - Bifidobacterium_longum
 - Sneathia_amnii
 - Prevotella_bivia
 - Prevotella_amnii
 - Streptococcus_agalactiae
 - Prevotella_timonensis
 - Prevotella_corporis
 - BVAB1
 - Lactobacillus_kefiranofaciens
 - Lactobacillus_gasseri
 - Lactobacillus_coleohominis
 - Prevotella_buccalis
 - Finegoldia_magna
 - Sneathia_sanguinegens
 - Staphylococcus_lugdunensis
 - Megaspheara_genomosp.
 - Peptostreptococcus_anaerobius
 - Mageeibacillus_indolicus
 - other

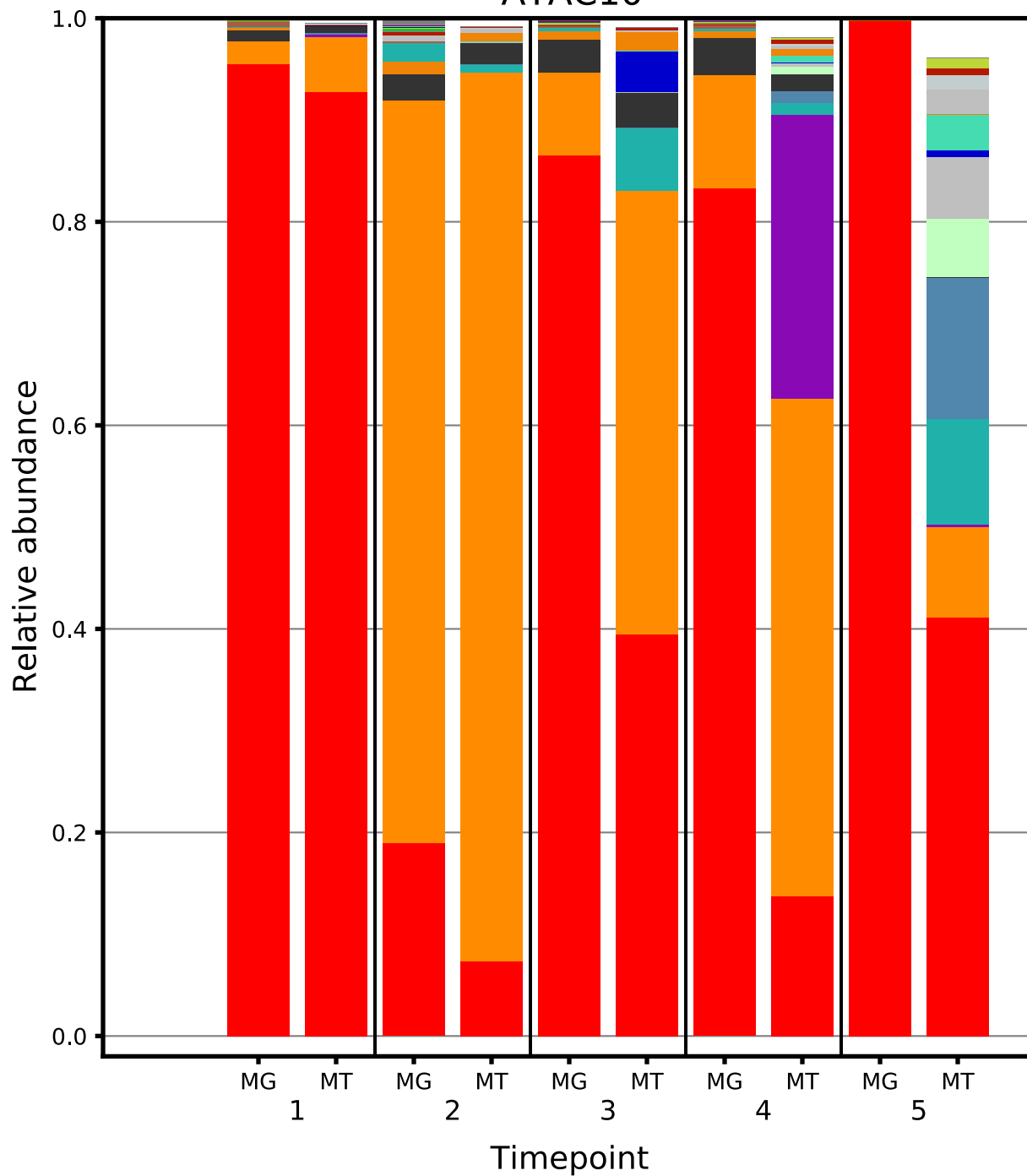
AYAC02



Phylotype

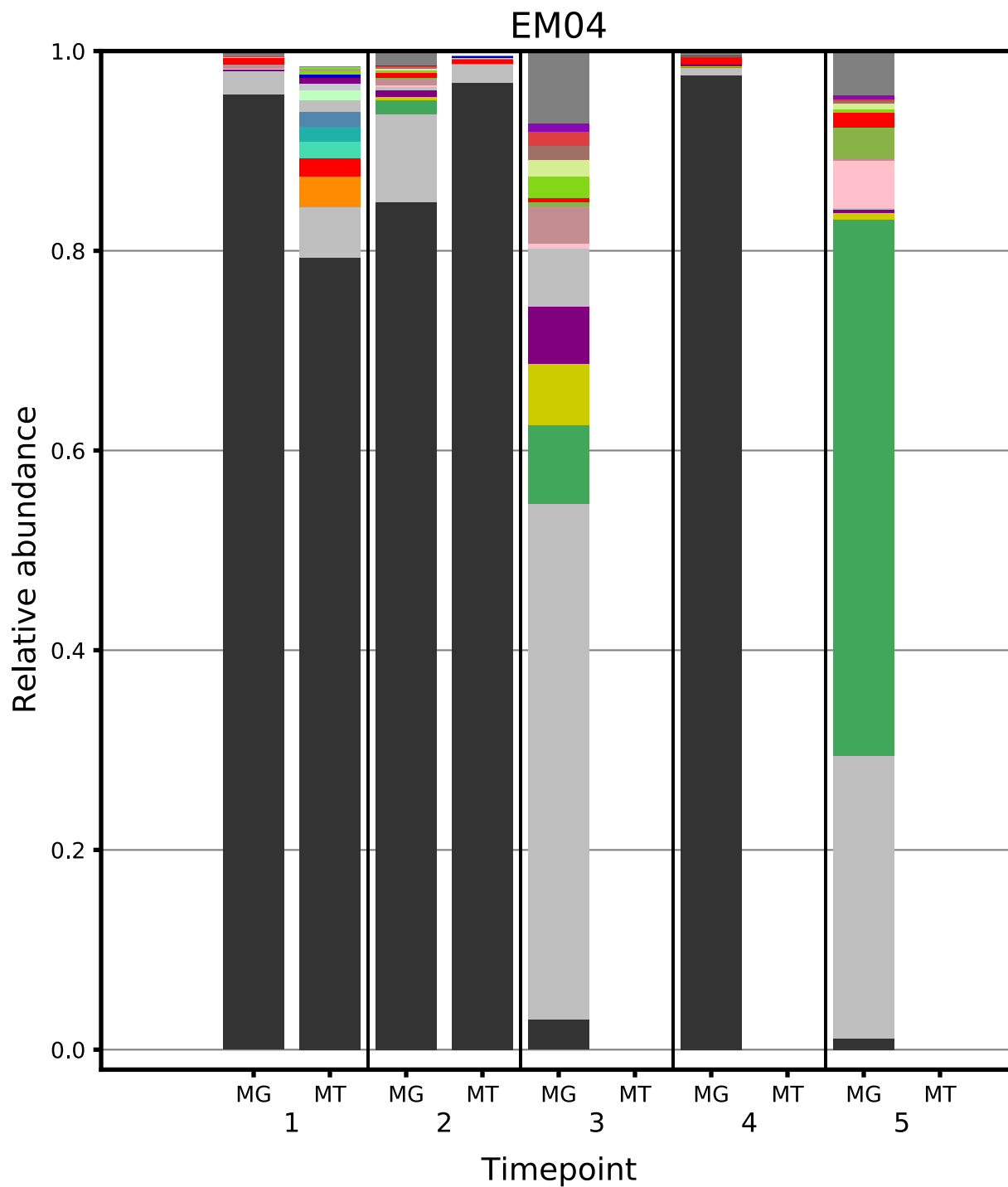
- Lactobacillus_crispatus
- Lactobacillus_iners
- Lactobacillus_jensenii
- Propionibacterium_sp.
- Escherichia_coli
- Gardnerella_vaginalis
- Sneathia_amnii
- Lactobacillus_coleohominis
- Prevotella_bivia
- Bifidobacterium_breve
- BVAB1
- Prevotella_timonensis
- Streptococcus_anginosus
- Atopobium_vaginae
- Corynebacterium_aurimucosum
- Prevotella_amnii
- Lactobacillus_gasseri
- Sneathia_sanguinegens
- Mageeibacillus_indolicus
- Finegoldia_magna
- Megaspheara_genomosp.
- other

AYAC10



Phylotype

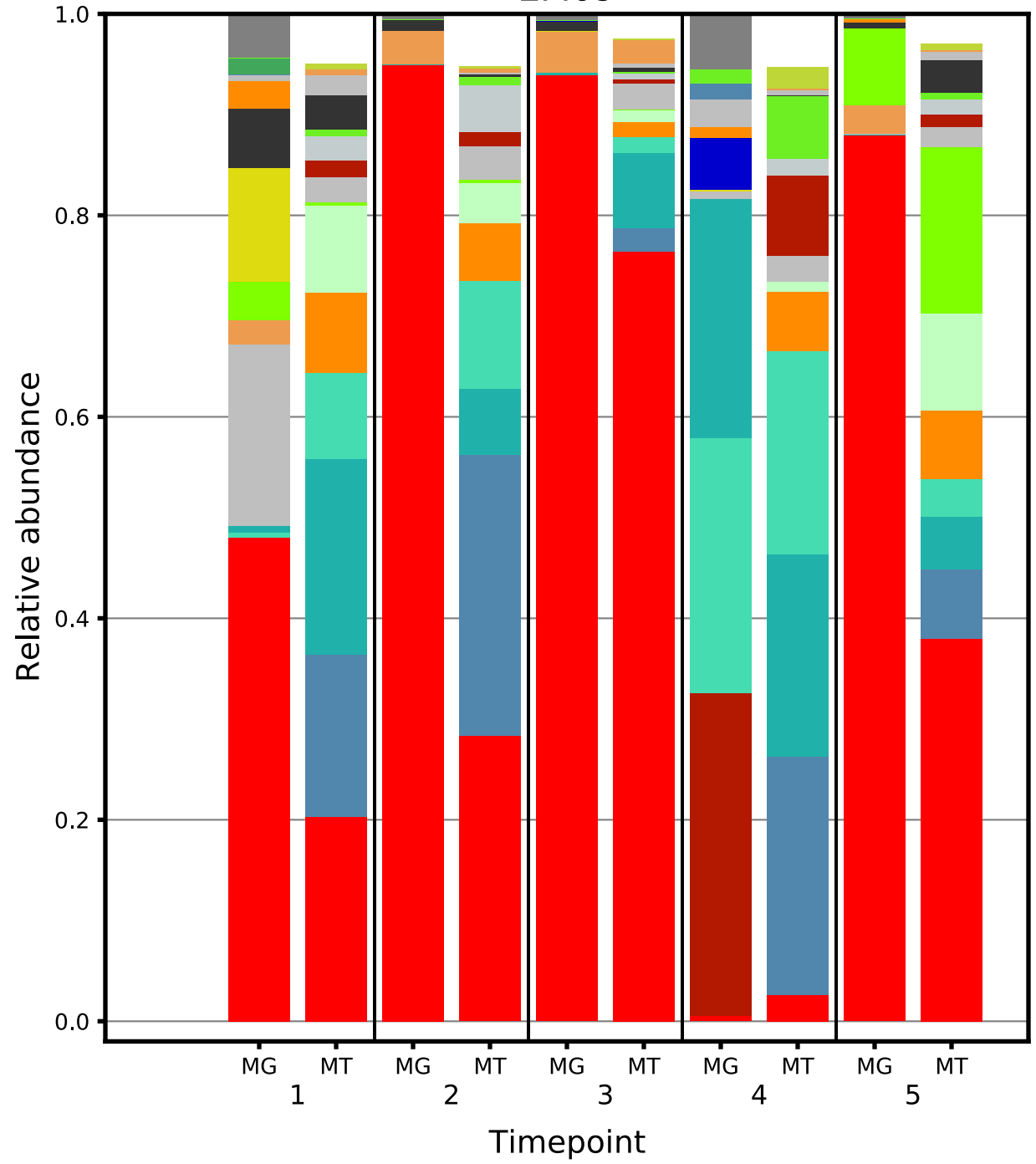
- Lactobacillus_jensenii*
- Prevotella_bivia*
- Streptococcus_anginosus*
- Lactobacillus_iners*
- Peptoniphilus_harei*
- Lactobacillus_crispatus*
- Fingoldia_magna*
- Prevotella_amnii*
- Prevotella_timonensis*
- Gardnerella_vaginalis*
- Streptococcus_agalactiae*
- Sneathia_amnii*
- Prevotella_corporis*
- Streptococcus_urinalis*
- Bifidobacterium_breve*
- Sneathia_sanguinegens*
- Prevotella_buccalis*
- Prevotella_disiens*
- Atopobium_vaginae*
- Anaerococcus_hydrogenalis*
- Veillonella_parvula*
- Propionibacterium_sp.*
- Mageeibacillus_indolicus*
- other



Phylotype

- Lactobacillus_crispatus
- BVAB1
- Sneathia_amnii
- Prevotella_amnii
- Gardnerella_vaginalis
- Prevotella_bivia
- Lactobacillus_iners
- Lactobacillus_kefiranofaciens
- Bifidobacterium_breve
- Lactobacillus_gasseri
- Peptostreptococcus_anaerobius
- Prevotella_timonensis
- Lactobacillus_jensenii
- Atopobium_vaginae
- Sneathia_sanguinegens
- Mageeibacillus_indolicus
- Streptococcus_anginosus
- Megaspheara_genomosp.
- other

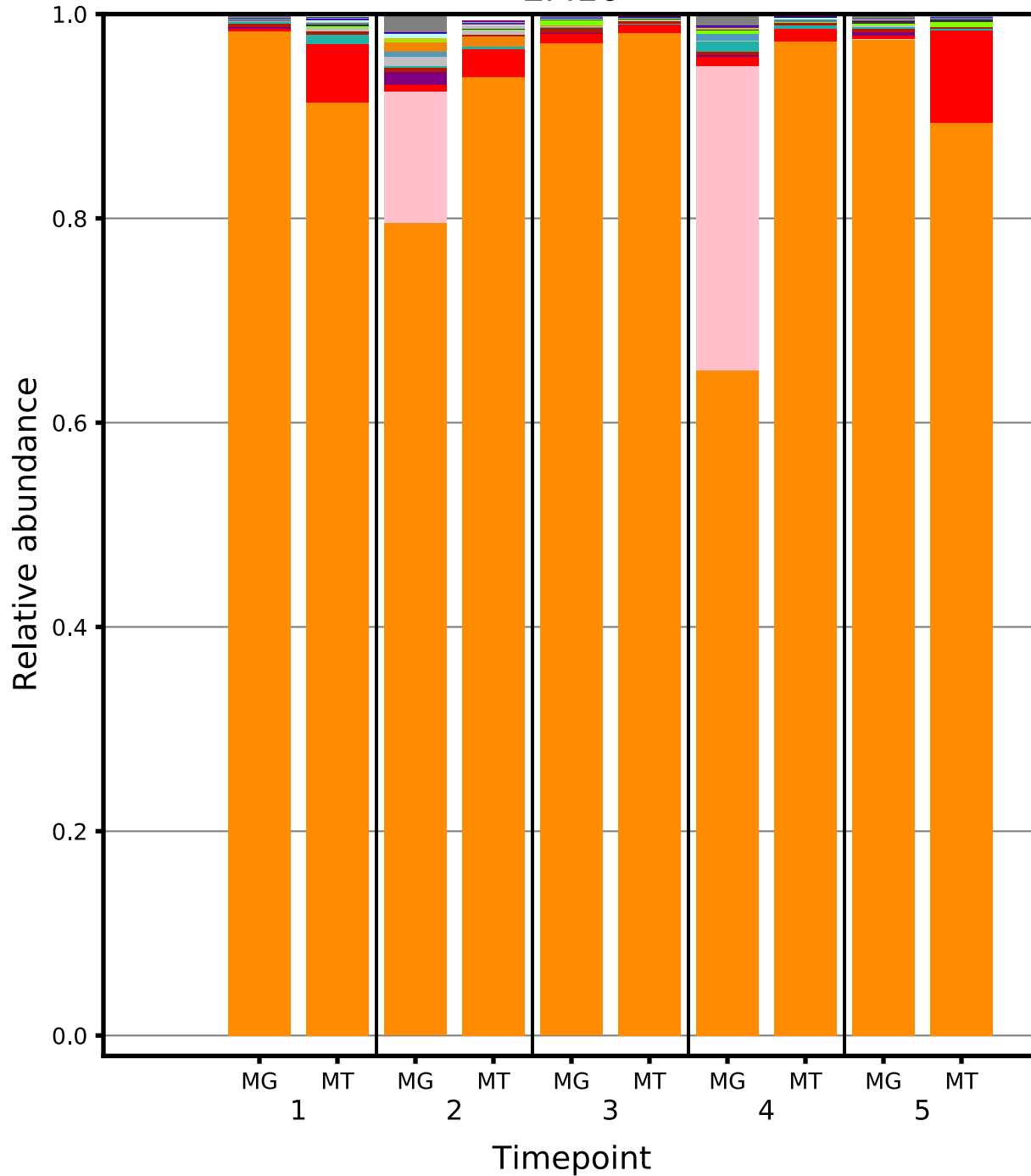
EM09



Phylotype

- Lactobacillus_iners
- Streptococcus_agalactiae
- Lactobacillus_crispatus
- Gardnerella_vaginalis
- Finegoldia_magna
- Escherichia_coli
- BVAB1
- Prevotella_bivia
- Lactobacillus_gasseri
- Staphylococcus_aureus
- Lactobacillus_jensenii
- Sneathia_amnii
- Prevotella_timonensis
- Bifidobacterium_breve
- Peptoniphilus_harei
- Propionibacterium_sp.
- Enterococcus_faecalis
- Atopobium_vaginae
- Prevotella_amnii
- other

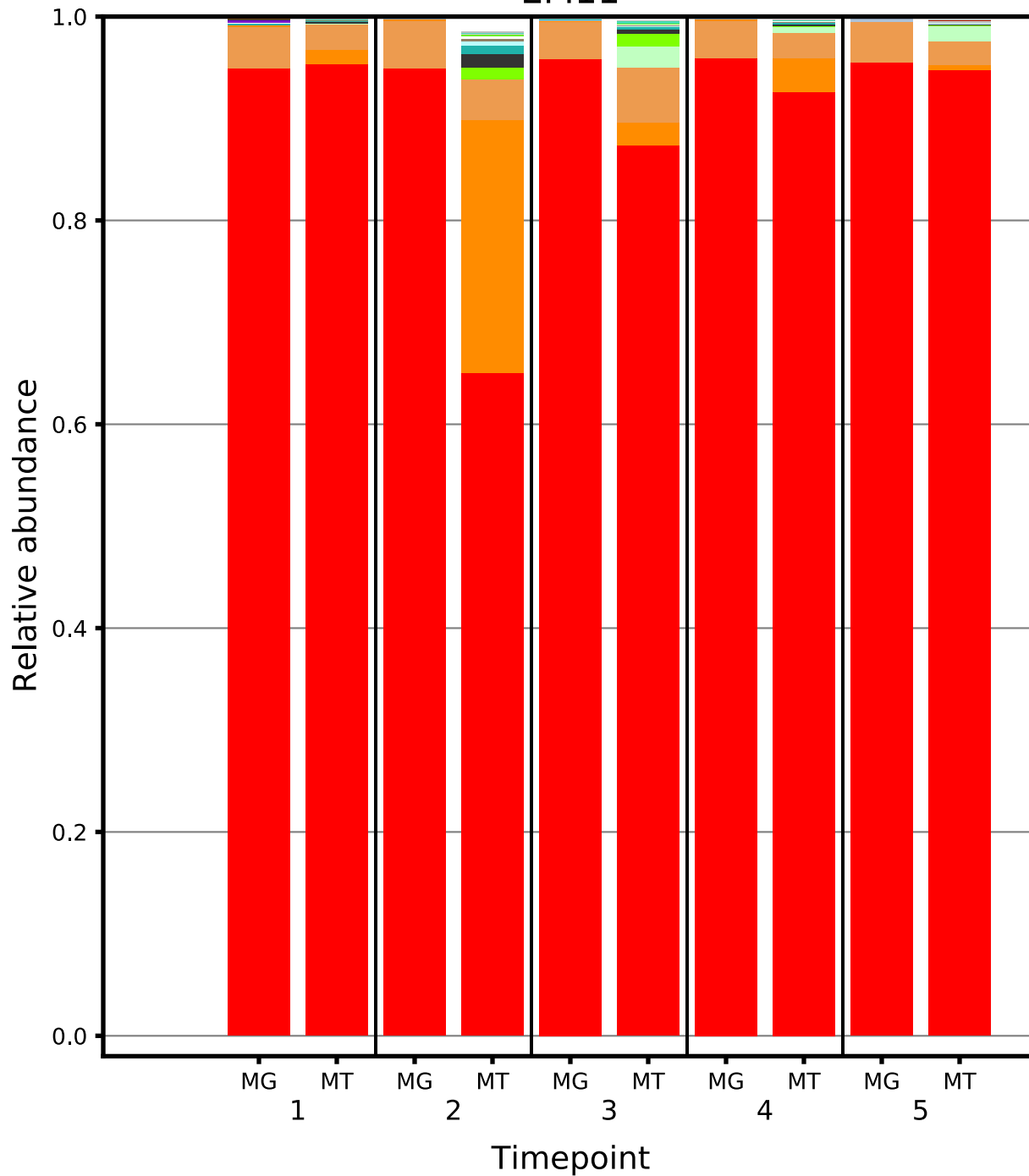
EM10



Phylotype

- Lactobacillus_crispatus
- Lactobacillus_kefiranofaciens
- Lactobacillus_iners
- Lactobacillus_johnsonii
- Bifidobacterium_breve
- Gardnerella_vaginalis
- Lactobacillus_gasseri
- Lactobacillus_vaginalis
- Lactobacillus_jensenii
- Corynebacterium_amycolatum
- Enterococcus_faecalis
- Lactobacillus_ultunensis
- Finegoldia_magna
- Mageeibacillus_indolicus
- Sneathia_sanguinegens
- Lactobacillus_helveticus
- BVAB1
- Staphylococcus_haemolyticus
- Prevotella_amnii
- Corynebacterium_pseudogenitalium
- Prevotella_bivia
- other

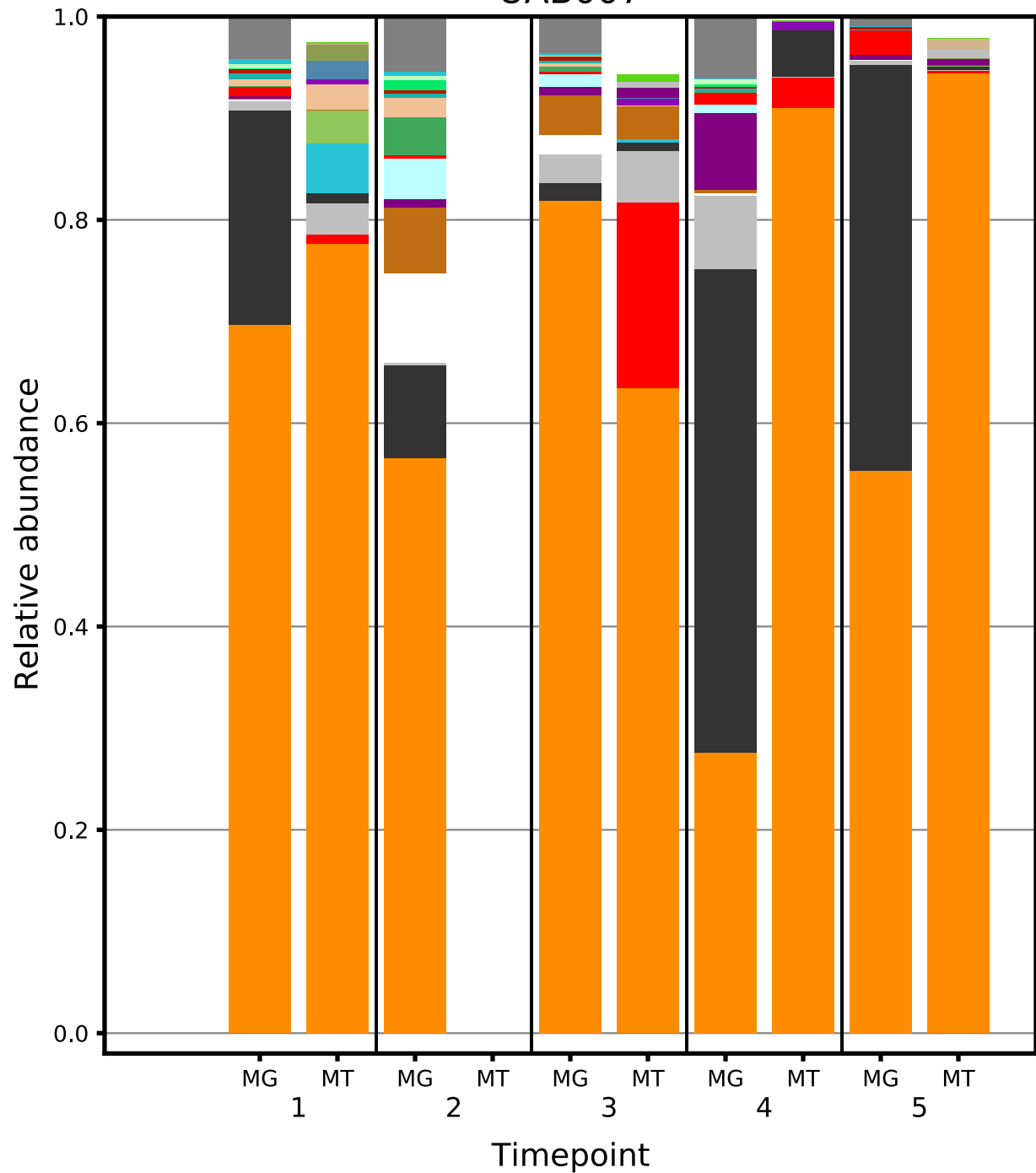
EM11



Phylotype

- Lactobacillus_iners*
- Lactobacillus_jensenii*
- Lactobacillus_crispatus*
- Prevotella_bivia*
- Staphylococcus_epidermidis*
- Corynebacterium_pseudogenitalium*
- Gemella_haemolysans*
- Finegoldia_magna*
- Ureaplasma_urealyticum*
- Enterococcus_faecalis*
- Streptococcus_mitis*
- Streptococcus_anginosus*
- Propionibacterium_sp.*
- Sneathia_amnii*
- Gardnerella_vaginalis*
- BVAB1*
- Haemophilus_parainfluenzae*
- Corynebacterium_glucuronolyticum*
- Prevotella_timonensis*
- Bifidobacterium_breve*
- Peptoniphilus_lacrimalis*
- Veillonella_atypica*
- other

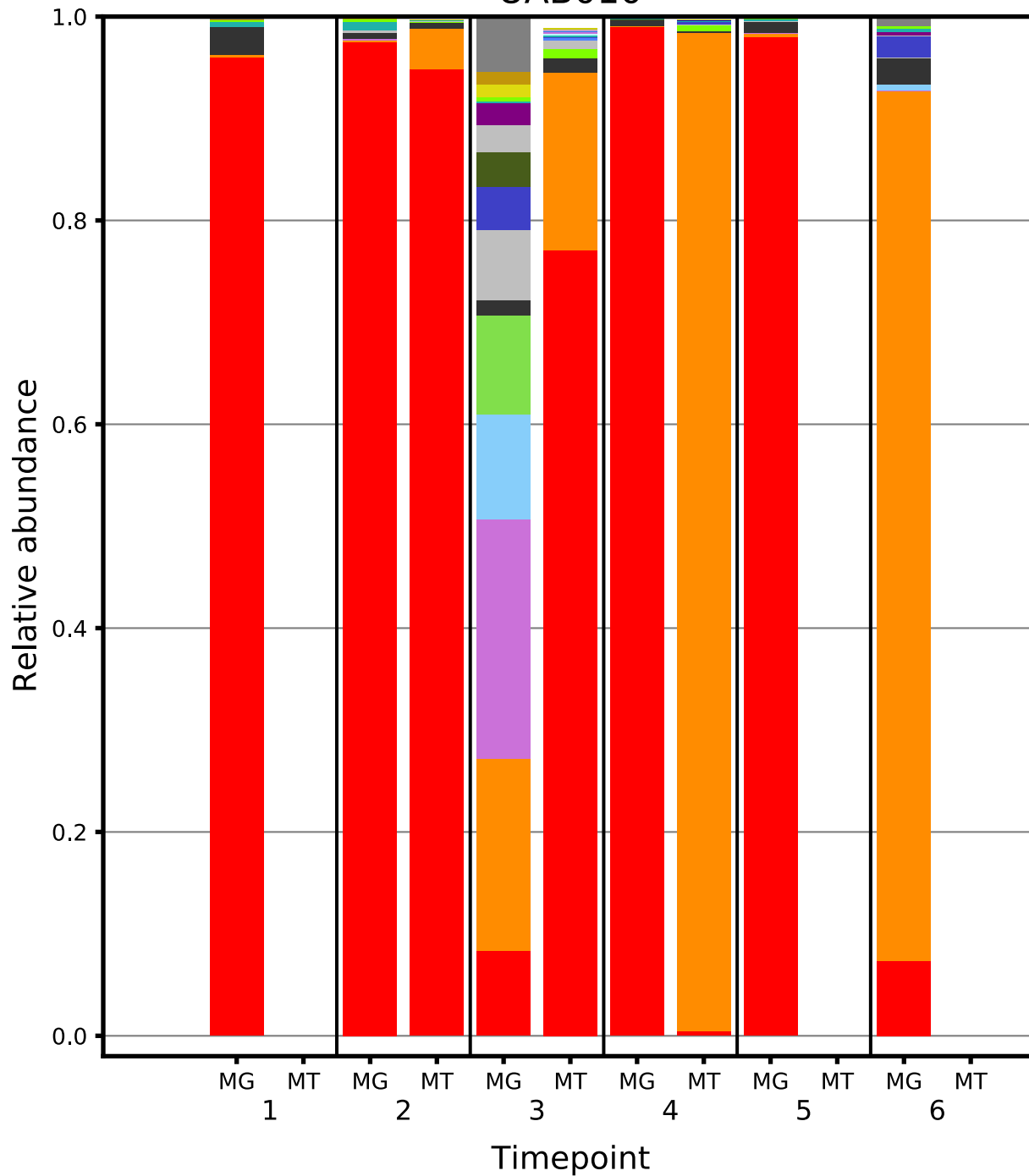
UAB007



Phylotype

- Lactobacillus_crispatus
- Lactobacillus_iners
- Prevotella_disiens
- Lactobacillus_jensenii
- Anaerococcus_tetradius
- Lactobacillus_gasseri
- Actinomyces_turicensis
- Prevotella_timonensis
- Prevotella_bivia
- Lactobacillus_ultunensis
- Streptococcus_anginosus
- Anaerococcus_lactolyticus
- Gardnerella_vaginalis
- Enterococcus_faecalis
- Finegoldia_magna
- Treponema_phagedenis
- Roseomonas_cervicalis
- Peptostreptococcus_anaerobius
- Atopobium_vaginae
- Prevotella_buccalis
- Peptoniphilus_harei
- other

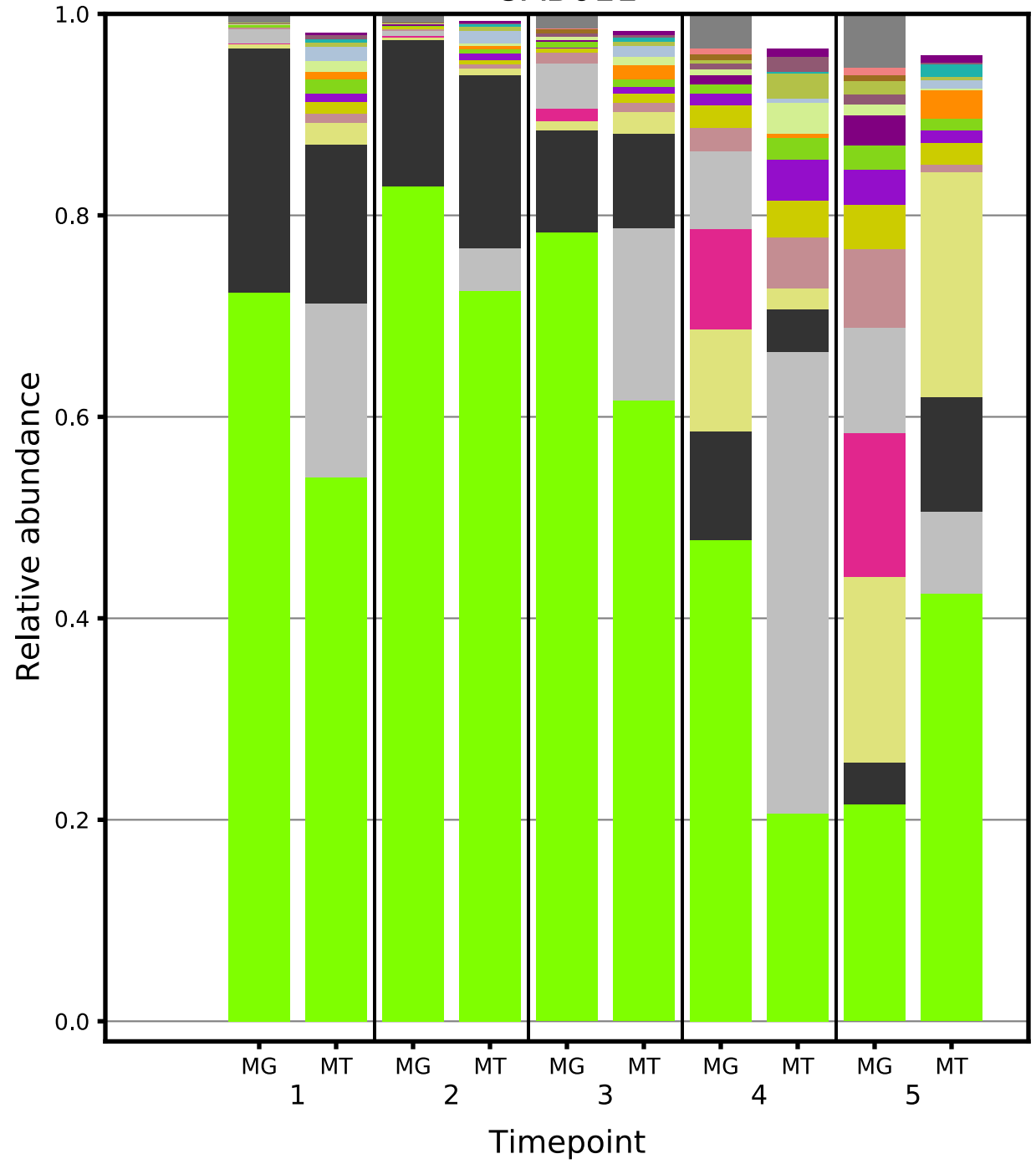
UAB010



Phylotype

- Lactobacillus_gasseri
- Lactobacillus_jensenii
- Prevotella_timonensis
- Anaerococcus_lactolyticus
- Propionimicrobium_lymphophilum
- Prevotella_corporis
- Peptoniphilus_harei
- Clostridiales_Family
- Prevotella_buccalis
- Lactobacillus_iners
- Finegoldia_magna
- Prevotella_disiens
- Lactobacillus_johnsonii
- Prevotella_bergensis
- Peptoniphilus_duerdenii
- Gardnerella_vaginalis
- Prevotella_multiformis
- Mobiluncus_mulieris
- other

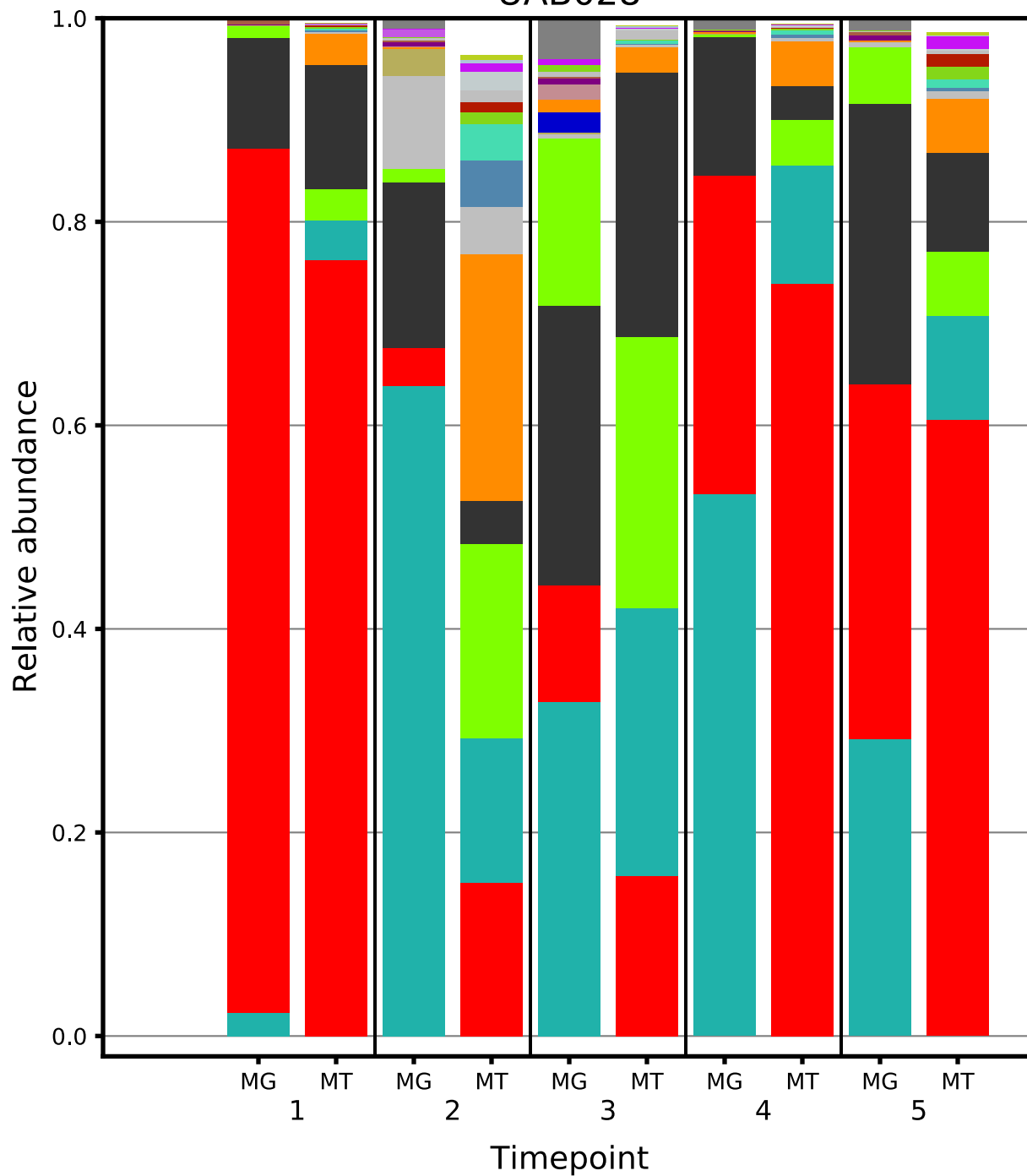
UAB011



Phylotype

- Gardnerella_vaginalis
- Lactobacillus_crispatus
- Lactobacillus_jensenii
- Lactobacillus_gasseri
- Prevotella_bivia
- Lactobacillus_iners
- Actinomyces_neuii
- Prevotella_timonensis
- Atopobium_vaginae
- Sneathia_amnii
- Prevotella_amnii
- Prevotella_corporis
- Prevotella_buccalis
- Finegoldia_magna
- BVAB1
- Lactobacillus_coleohominis
- Sneathia_sanguinegens
- Prevotella_sp.
- Staphylococcus_lugdunensis
- Lactobacillus_johnsonii
- Porphyromonas_uenonis
- other

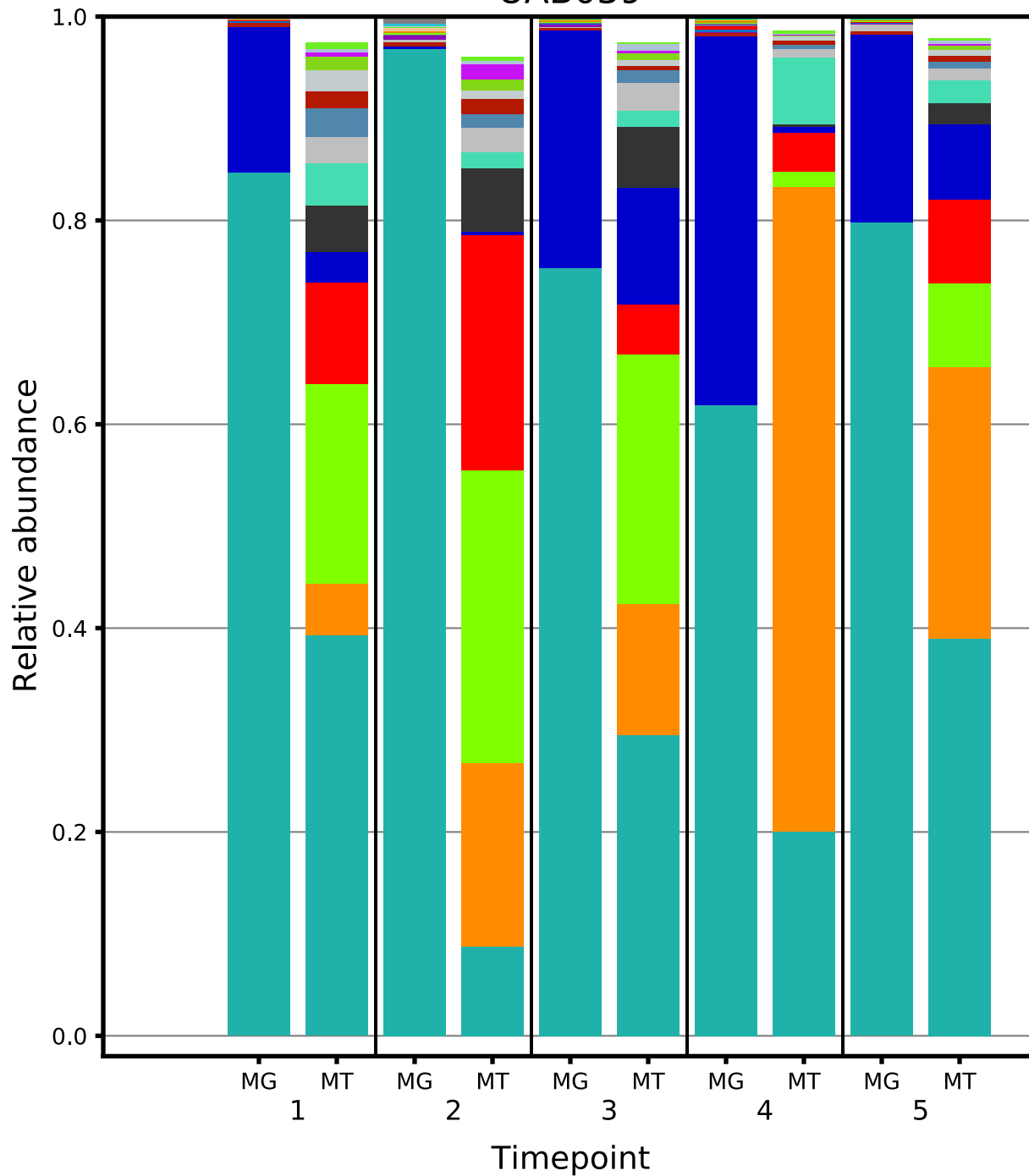
UAB028



Phylotype

- Gardnerella_vaginalis
- Atopobium_vaginae
- Lactobacillus_iners
- BVAB1
- Lactobacillus_gasseri
- Prevotella_bivia
- Lactobacillus_crispatus
- Propionibacterium_sp.
- Lactobacillus_salivarius
- Lactobacillus_jensenii
- Prevotella_amnii
- Peptoniphilus_asaccharolyticus
- Prevotella_timonensis
- Sneathia_amnii
- Actinomyces_graevenitzi
- Sneathia_sanguinegens
- Streptococcus_mitis
- Prevotella_buccalis
- Mageeibacillus_indolicus
- Prevotella_sp.
- Lactobacillus_johnsonii
- Gemella_haemolysans
- other

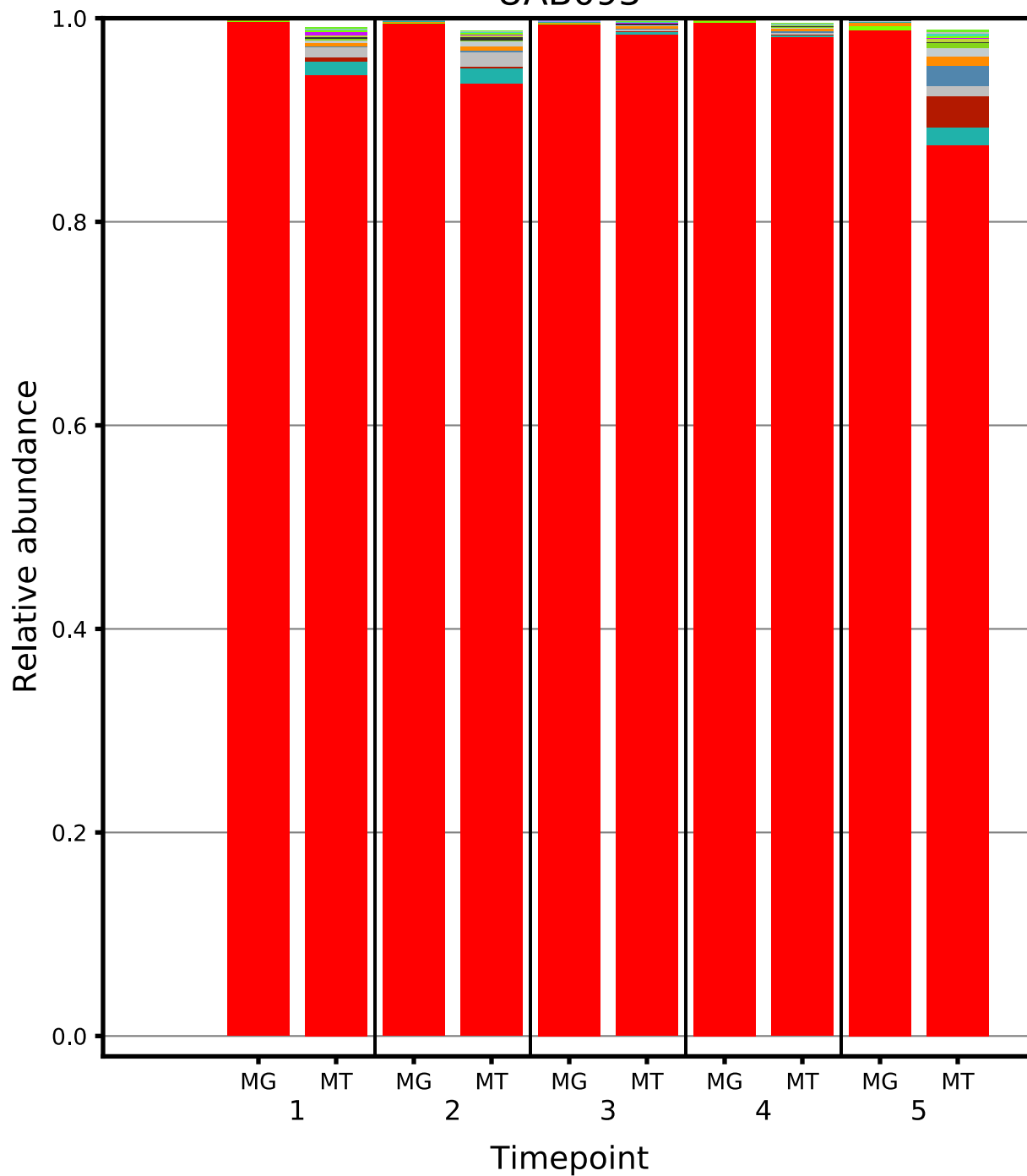
UAB039



Phylotype

- Lactobacillus_crispatus
- Lactobacillus_gasseri
- Gardnerella_vaginalis
- Lactobacillus_iners
- BVAB1
- Prevotella_timonensis
- Lactobacillus_johnsonii
- Sneathia_amnii
- Lactobacillus_jensenii
- Ureaplasma_parvum
- Sneathia_sanguinegens
- Lactobacillus_ultunensis
- Prevotella_buccalis
- Finegoldia_magna
- Ureaplasma_urealyticum
- Megaspheara_genomosp.
- Lactobacillus_helveticus
- Prevotella_sp.
- Anaerococcus_hydrogenalis
- Prevotella_amnii
- Facklamia_hominis
- Prevotella_bivia
- Streptococcus_anginosus
- Mageeibacillus_indolicus
- other

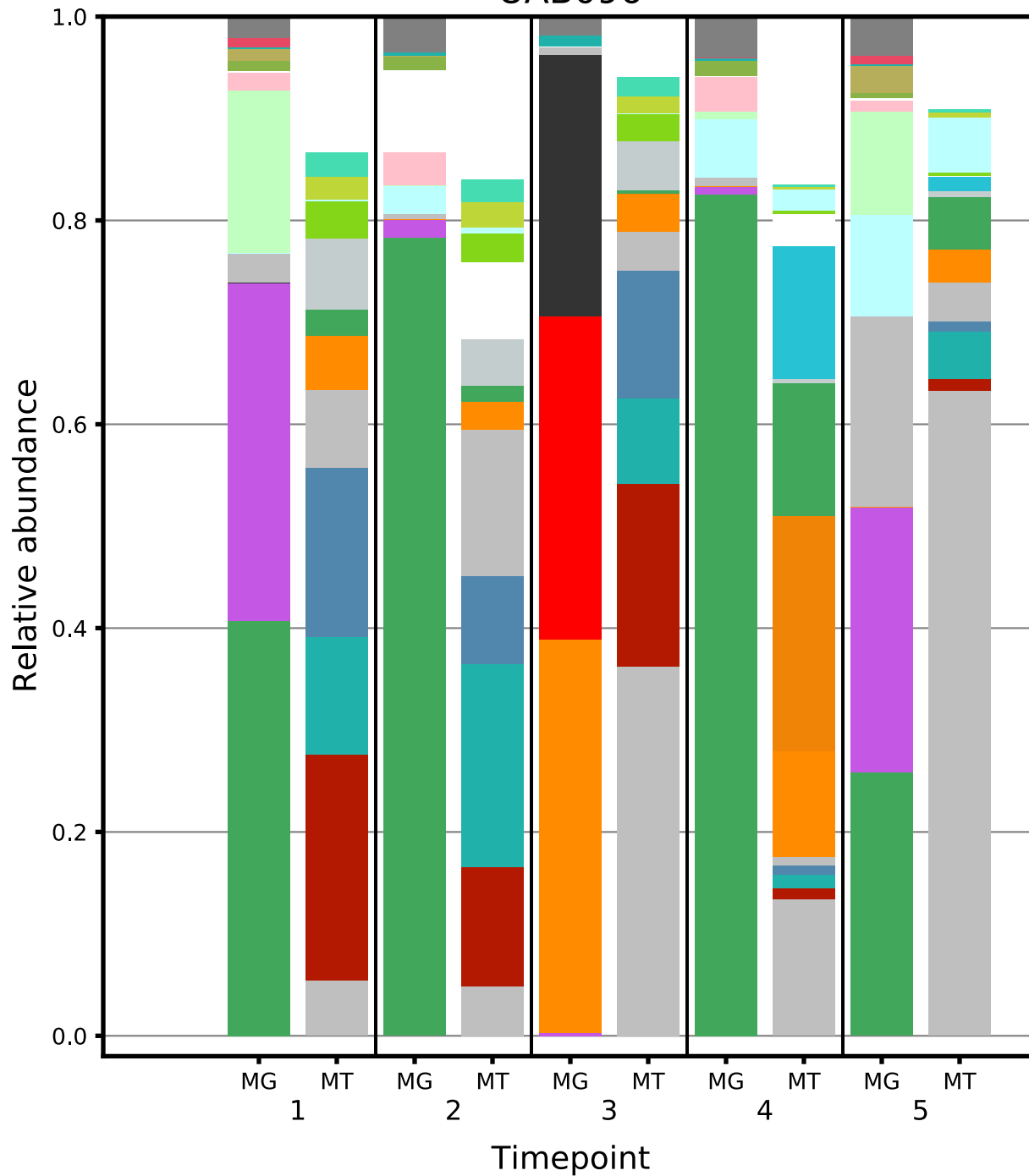
UAB093



Phylotype

- Streptococcus_anginosus
- Prevotella_bivia
- Staphylococcus_lugdunensis
- BVAB1
- Lactobacillus_iners
- Gardnerella_vaginalis
- Lactobacillus_crispatus
- Sneathia_amnii
- Lactobacillus_jensenii
- Prevotella_timonensis
- Enterococcus_faecalis
- Escherichia_coli
- Bifidobacterium_breve
- Bifidobacterium_longum
- Sneathia_sanguinegens
- Streptococcus_agalactiae
- Gemella_haemolysans
- Staphylococcus_epidermidis
- Streptococcus_urinalis
- Prevotella_buccalis
- Actinomyces_neuui
- Megaspheara_genomosp.
- Bifidobacterium_sp.
- Prevotella_amnii
- other

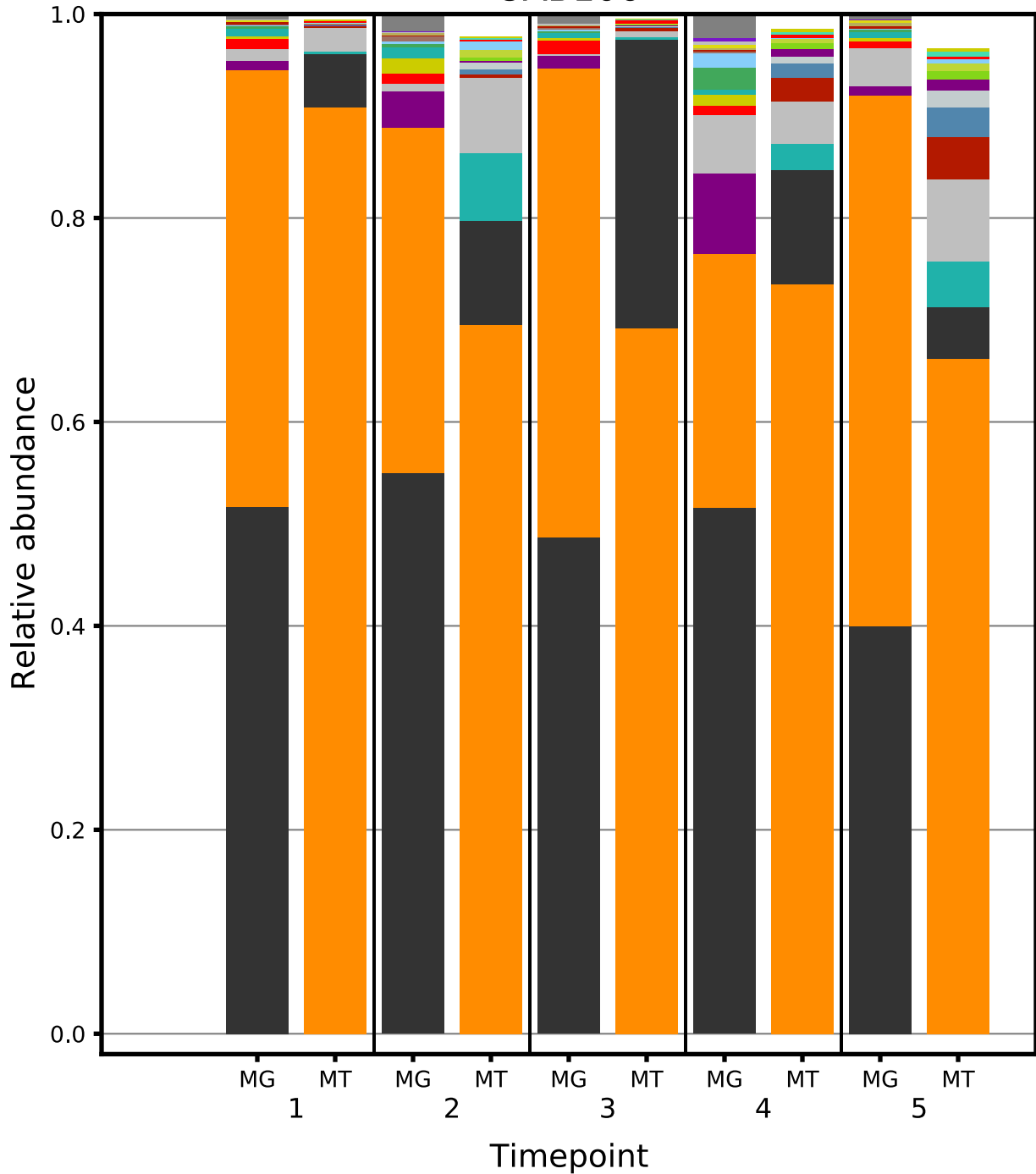
UAB096

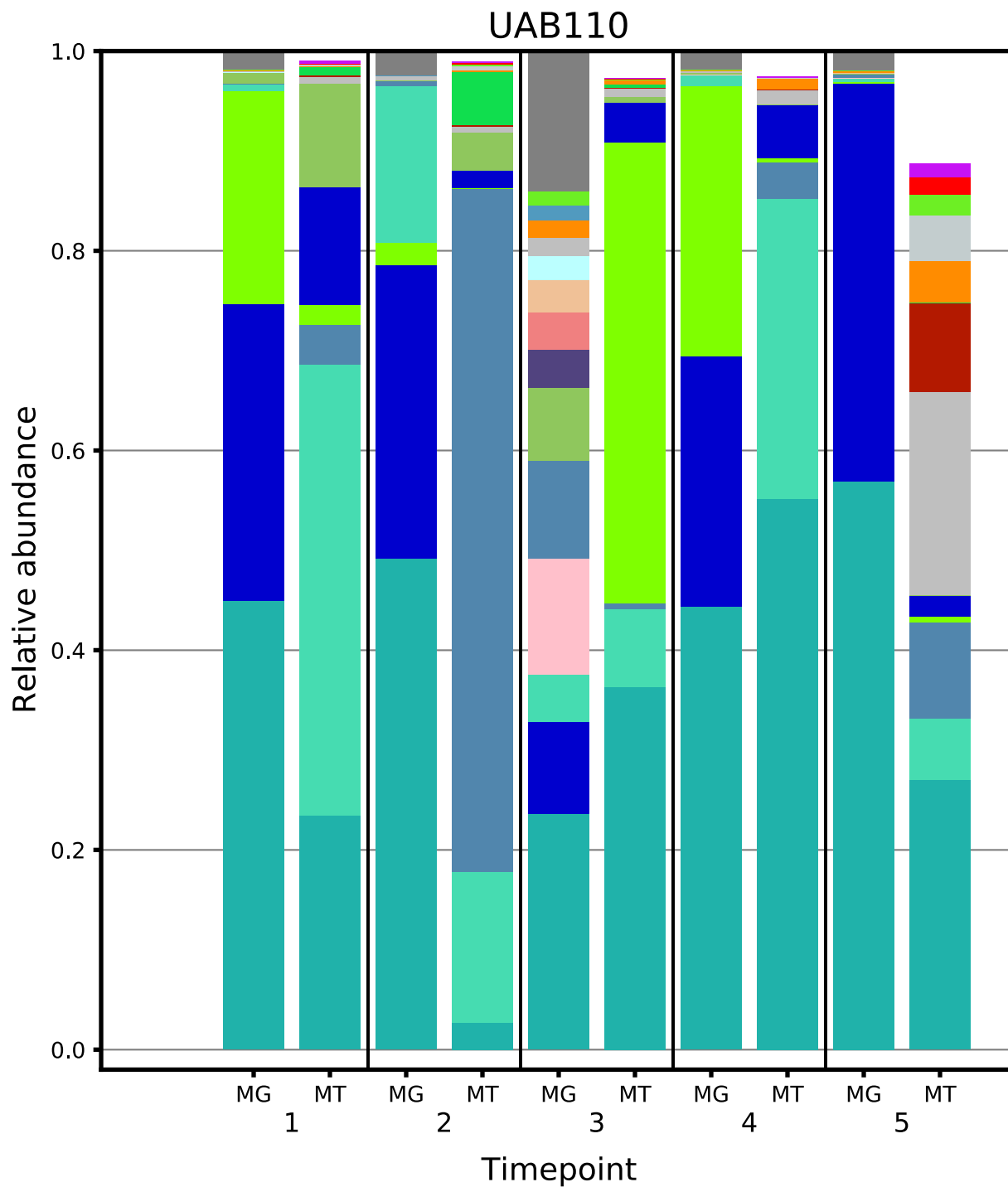
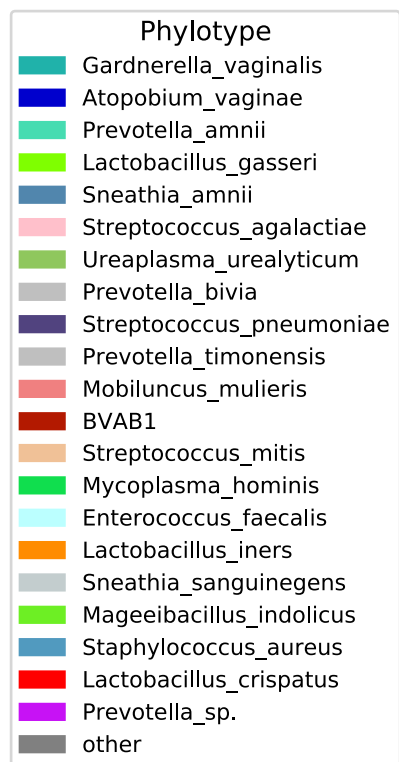


Phylotype

- Lactobacillus_jensenii
- Lactobacillus_iners
- Finegoldia_magna
- Gardnerella_vaginalis
- Prevotella_bivia
- Prevotella_timonensis
- Lactobacillus_crispatus
- Peptoniphilus_harei
- BVAB1
- Sneathia_amnii
- Streptococcus_anginosus
- Sneathia_sanguinegens
- Anaerococcus_tetradius
- Anaerococcus_hydrogenalis
- Prevotella_buccalis
- Megaspheara_genomosp.
- Actinomyces_neuui
- Peptostreptococcus_anaerobius
- Prevotella_amnii
- Corynebacterium_amycolatum
- other

UAB106

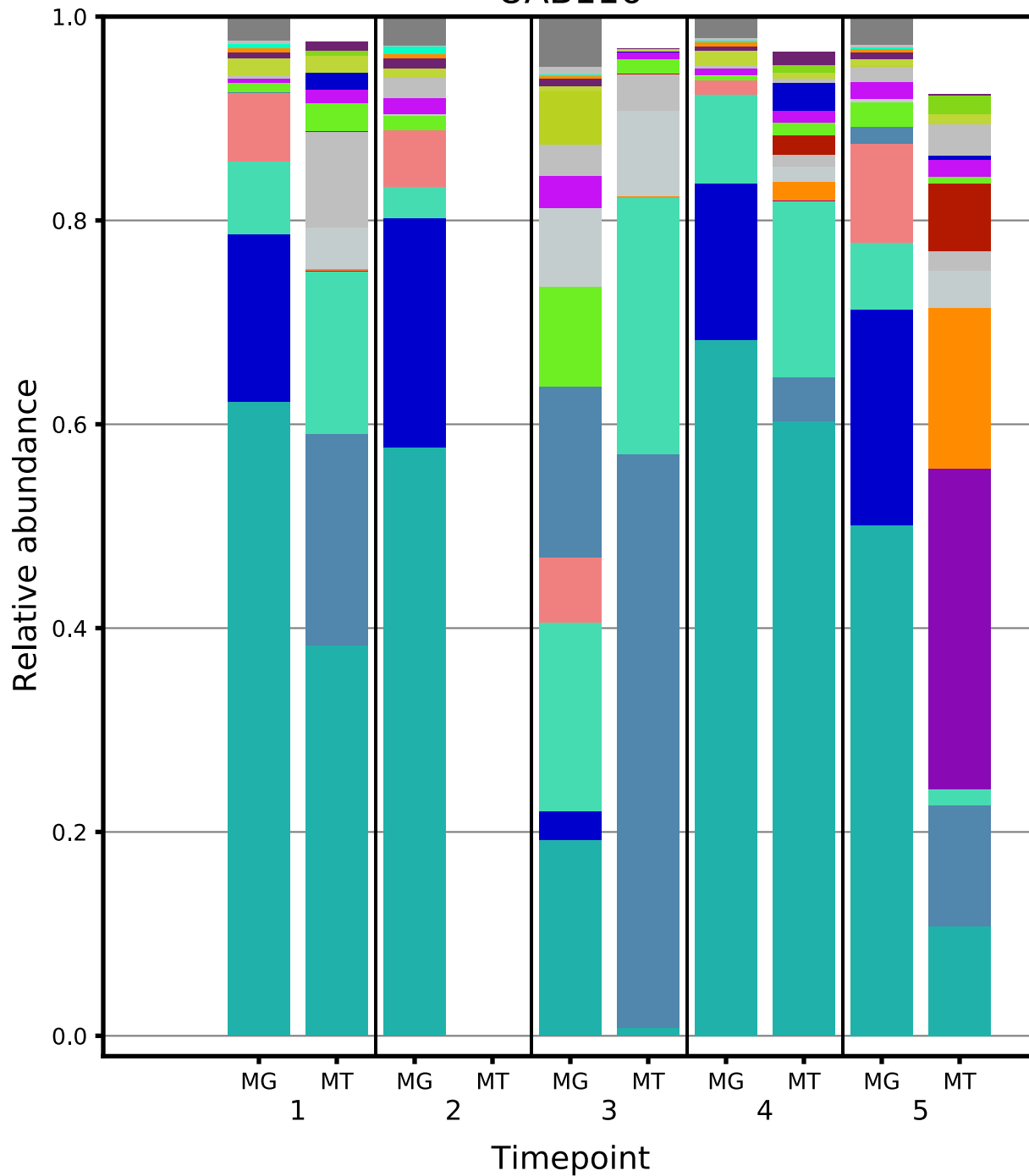




Phylotype

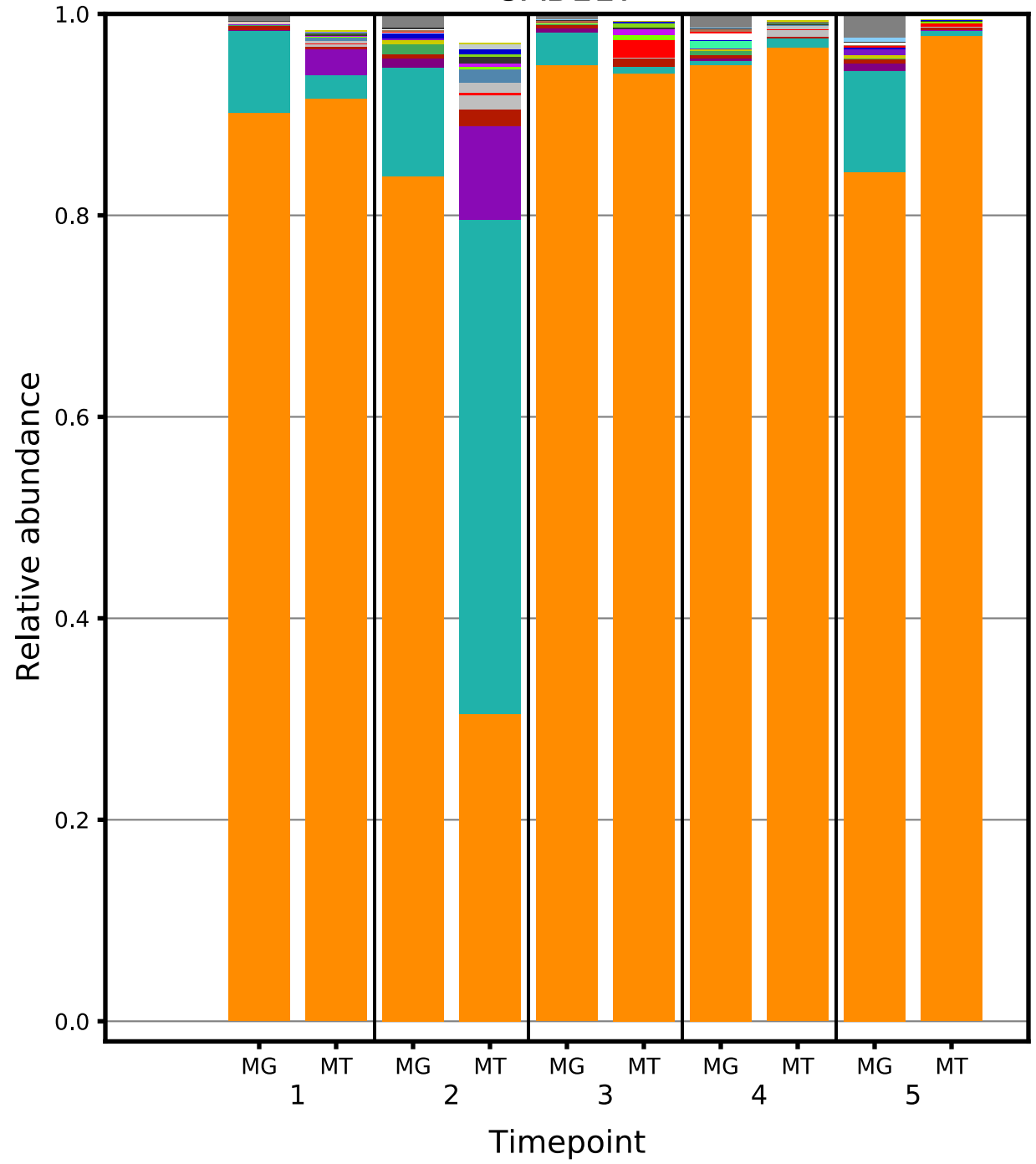
- Gardnerella_vaginalis
- Atopobium_vaginae
- Sneathia_amnii
- Prevotella_amnii
- Mobiluncus_mulieris
- Propionibacterium_sp.
- Lactobacillus_iners
- Mageeibacillus_indolicus
- Sneathia_sanguinegens
- Prevotella_timonensis
- Prevotella_sp.
- BVAB1
- Porphyromonas_uenonis
- Megasphaera_genomosp.
- Ruminococcus_lactaris
- Prevotella_bivia
- Megasphaera_micronuciformis
- Prevotella_buccalis
- other

UAB116



- Phylotype
- Lactobacillus_iners
 - Gardnerella_vaginalis
 - Finegoldia_magna
 - Propionibacterium_sp.
 - BVAB1
 - Streptococcus_anginosus
 - Prevotella_bivia
 - Peptoniphilus_harei
 - Lactobacillus_crispatus
 - Corynebacterium_amycolatum
 - Prevotella_timonensis
 - Staphylococcus_haemolyticus
 - Sneathia_amnii
 - Atopobium_vaginae
 - Lactobacillus_gasseri
 - Staphylococcus_epidermidis
 - Prevotella_sp.
 - Lactobacillus_jensenii
 - Corynebacterium_aurimucosum
 - Prevotella_buccalis
 - Lactobacillus_vaginalis
 - Sneathia_sanguinegens
 - Anaerococcus_tetradus
 - other

UAB117



Phylotype

- Bifidobacterium_breve
- Lactobacillus_iners
- BVAB1
- Gardnerella_vaginalis
- Bifidobacterium_longum
- Corynebacterium_amycolatum
- Sneathia_amnii
- Corynebacterium_jeikeium
- Staphylococcus_epidermidis
- Corynebacterium_pseudogenitalium
- Prevotella_bivia
- Corynebacterium_aurimucosum
- Sneathia_sanguinegens
- Streptococcus_agalactiae
- Prevotella_timonensis
- Finegoldia_magna
- Propionibacterium_sp.
- Brevibacterium_mcbrellneri
- Prevotella_buccalis
- Megasphaera_genomosp.
- Gemella_haemolysans
- Prevotella_amnii
- Enterococcus_faecalis
- other

UAB129

