```
—p Desantisbacteria
b) UBP18
—p UBA9089
p JACRDZ01
—p JACRDZ01
—p JAFGBW01
—p Auribacterota
—p UBA6266
—p JABMQX01
—p UBA3054
—p PUNC01
—p UBA1439
-p JAKLEM01
—p GCA-001730085
—p Omnitrophota
—p Ratteibacteria
—p JAHJD001
—p NPL-UPA2
—p BS750m-G34
—p CAIJMQ01
—p Aerophobota
—p Goldbacteria
-p JAAXVQ01
—p FIrestonebacteria
-p JAAXVQ01
—p FCPU426
—p CAKKQC01
-p JAJYCY01
—p CG03
—p Elusimicrobiota
p UBA6262
—p Margulisbacteria
p DUA6262
—p Margulisbacteria
—p Bacillota E
—p Bacillota F
-p DTU030
-p SLNR01
—p Bacillota H
—p Bacillota D
—p Bacillota D
—p Bacillota C
p Dacillota C
p Dacillota A
p DUMD01
-p Bacillota G
附
      ե
                                                                                               p Bacillota A
p DUMD01
                                                                                                                 -p Bacillota G
----p Eremiobacterota
------p Armatimopada
                                                                                               p Eremiobacterota
p Armatimonadota
p UBP13
p Chloroflexota
p Dormibacterota
p CSP1-3
p Actinomycetota
p Caldisericota
p JANLFM01
p Coprothermobacterota
p HKB111
p Thermodesulfobiota
p Dictyoglomota
p Dictyoglomota
p Dictyoglomota
p Dimidacterota
p Fusobacteriota
p Wallbacteria
p Wallbacteria
p Wallbacteria
p Wallbacteria
p Deprothermobacteria
p Berro
p HRB113
p Patescibacteria
p Wallbacteria
p Wallbacteria
p Deinococcota
p Bipolaricaulota
p Deinococcota
p Bipolaricaulota
p Ballovibrionota
p SAR324
p UBP6
p Desulfobacterota B
p Myxococcota A
p JADJOY01
p JAGRBM01
p Myxococcota
p FEN-1099
p Myxococcota
p FEN-1099
p Myxococcota
p FEN-1099
p Desulfobacterota
p Dirospirota
p Desulfobacterota
p Nitrospirota
p CG2-30-70-394
p Nitrospirota
p Nitrospirota
p ACPQX01
p JACPQX01
p JACPQX01
p JACPQX01
p JACPOX01
                                                                                      —p Modulifiexum
-p SZUA-182
—p Desulfobacterota F
-p Desulfobacterota C
—p BMS3Abin14
—p Desulfobacterota A
—p UBA2233
—p Pseudomonadota
—p J088
—p SZUA-79
—p JAMCPX01
—p Desulfobacterota G
—p DYJV01
—p Calescibacterota D
—p Desulfobacterota D
—p Deferribacterota
—p Chrysiogenota
-p Thermosulfidibacterota
—p Chrysiogenota
-p Thermosulfidibacterota
—p Campylobacterota
—p CSSED10-310
—p B130-G9
—p Acidobacteriota
-p Acidobacteriota
-p Acidobacteriota
-p GCA-2686955
—p Krumholzibacteriota
—p JAGLYR01
—p JAGLYR01
—p JAGLYR01
—p JAGLYR01
—p JAGLTZ01
—p Latescibacterota
—p SM23-31
—p BS750m-G25
—p QNDG01
—p UBP14
—p Cloacimonadota
—p Bacteroidota
—p SM23-31
—p BS750m-G25
—p QNDG01
—p JdFR-76
—p KSB1
—p Caldirichota
—p Delongbacteria
—p JAGOEH01
—p Fibrobacterota
—p Fermentibacterota
—p RBG-13-66-14
—p Poribacteria
                                                                                                  -P UBF4
—p Hydrogenedentota
-p Abyssobacteria
—p OLB16
—p Sumerlaeota
                                                                                                              p Verrucomicrobiota
p Verrucomicrobiota
p Chlamydiota
p Planctomycetota
p T1Sed10-126
p Lindowbacteria
p UBA8481
                                                                                                                             p Lindowbacteria

DUBA8481

p Dependentiae

p AUK180

T1SED10–198M

JAGOBX01

p Nanoarchaeota

p Huberarchaeota

p Huberarchaeota

p EX4484–52

p Nanohaloarchaeota

p Aenigmatarchaeota

p JAADDD01

p JAADDD01

p Altiarchaeota

p lainarchaeota

p B1Sed10–29

p Micrarchaeota

p Hadarchaeota

p Hadarchaeota

p Hadarchaeota

p Thermoplasmatota

p Asgardarchaeota

p Inermoproteota

p Undinarchaeota
                                                                                                                 -p
                                                                                                  -b
```

p The p Undinarchaeota