

Supplemental Table S1. A taxonomical list of the named bacteria commonly presented in swine gastrointestinal tract as reported in the literature ^{1,2}

Phylum	Class	Order	Family	Genus	Species	(References)
Actinomycetota (Actinobacteriota)						
	Actinomycetes (Actinobacteria)					
	Actinomycetales					
	Actinomycetaceae					
		<i>Actinomyces</i>				
			<i>bovis</i> ; <i>hyovaginalis</i> ; <i>suimastitidis</i> ; <i>urogenitalis</i>			
			(Wylensek et al., 2020; Holman et al., 2022; Tan et al., 2017)			
		<i>Mobiluncus</i>				
			<i>curtisii</i> ; <i>mulieris</i> ; <i>porci</i>			
			(Tan et al., 2017; Holman et al., 2022)			
		<i>Trueperella</i>				
			<i>pyogenes</i>			
			(Tan et al., 2017; Holman et al., 2022)			
	Bifidobacteriales					
	Bifidobacteriaceae					
		<i>Bifidobacterium</i>				
			<i>animalis</i> ; <i>asteroides</i> ; <i>biavatii</i> ; <i>boum</i> ; <i>globosum</i> ; <i>longum</i> ; <i>kashiwanohense</i> ;			
			<i>merycicum</i> ; <i>pseudolongum</i> ; <i>saeculare</i> ; <i>thermacidophilum</i> ; <i>thermophilum</i> ;			
			<i>tsurumiense</i>			
			(Leser et al., 2002; Dowd et al., 2008; Tan et al., 2017; Wylensek et al., 2020, Holman et al., 2022; Gaio et al., 2021)			
	Catenulisporales					

Catenulisporaceae

Catenulispora

Acidiphila

(Yang et al., 2017)

Geodermatophilales

Geodermatophilaceae

Blastococcus

saxobsidens

(Yang et al., 2017)

Mycobacteriales (Corynebacteriales)

Corynebacteriaceae

Corynebacterium

ammoniogenes; diphtheriae; glucuronolyticum; kroppenstedtii; pseudotuberculosis; stationis; striatum; variabile; xerosis

(Dowd et al., 2008; Tan et al., 2017; Wang et al., 2019; Wylensek et al., 2020)

Mycobacteriaceae (Mycobactericidal)

Mycobacterium

tuberculosis

(Quan et al., 2020)

Nocardiaceae

Rhodococcus

coprophilus

(Tan et al., 2017)

Micrococcales

Micrococcaceae

Arthrobacter

sp.

(Wylensek et al., 2020)

Kocuria

sp.

(Dowd et al., 2008)

Micrococcus

luteus

(Wylensek et al., 2020)

Rothia

sp.

(Dowd et al., 2008)

Promicromonosporaceae

Aneriacter

sp.

(Luo et al., 2022)

Cellulosimicrobium

aquatile; cellulans

(Wang et al., 2019; Wylensek et al., 2020)

Xylanimonas

cellulosilytica

(Yang et al., 2017)

Micromonosporales

Micromonosporaceae

Actinoplanes

friuliensis; liguriensis; missouriensis

(Yang et al., 2017)

Nakamurellales

Nakamurellaceae

Nakamurella
multipartite
(Yang et al., 2017)

Propionibacteriales

Propionibacteriaceae
Propionibacterium
sp.
(Collado and Sanz, 2007)

Kitasatosporales

Streptomycetaceae
Streptomyces
xinghaiensis; *koyangensis*
(Tan et al., 2017; Wang et al., 2019)

Coriobacteriia

Coriobacteriales

Atopobiaceae
Atopobium
deltae; *parvulum*
(Dowd et al., 2008; Wang et al., 2019; Wylensek et al., 2020)
Olsenella
porci; *umbonate*
(Dowd et al., 2008; Wylensek et al., 2020)
Parafannyhessea
umbonate
(Holman et al., 2022)
Paratractidigestivibacter
faecalis

(Holman et al., 2022)

Parolsenella

sp.

(Holman et al., 2022)

Tractidigestivibacter

sp.

(Holman et al., 2022)

Coriobacteriaceae

Collinsella

aerofaciens; bouchesdurhonensis; tanakaei

(Wylensek et al., 2020; Tan et al., 2017; Holman et al., 2022; Ortiz Sanjuán et al., 2022)

Enorma

massiliensis

(Tan et al., 2017; Holman et al., 2022)

Eggerthellales

Eggerthellaceae

Denitrobacterium

detoxificans

(Tan et al., 2017; Wylensek et al., 2020)

Eggerthella

lenta

(Tan et al., 2017; Wylensek et al., 2020)

Thermoleophilia

Solirubrobacterales

Conexibacteraceae

Conexibacter

woesei

(Yang et al., 2017)

Bacillota (Firmicutes)

Bacilli

Bacillales

Bacillaceae

Bacillus

altitudinis; sporothermodurans; velezensis

(Leser et al., 2002; Dowd et al., 2008; Quan et al., 2020; Wylensek et al., 2020)

Paucisalibacillus

sp.

(Yin et al., 2018)

Psychrobacillus

sp.

(Wylensek et al., 2020)

Bacillales Family XI. Incertae Sedis³

Gemella

sp.

(Dowd et al., 2008)

Paenibacillaceae

Aneurinibacillus

aneurinilyticus

(Wylensek et al., 2020)

Brevibacillus

sp.

(Goodarzi et al., 2022)

Planococcaceae

Kurthia

huakuii

(Yang et al., 2017)

Solibacillus

silvestris

(Wang et al., 2019)

Staphylococcaceae

Staphylococcus

aureus; capitis; cohnii; epidermidis; haemolyticus; hominis; phage; schleiferi

(Robinson et al. 1981; Dowd et al., 2008; Quan et al., 2020; Tan et al., 2017; Wylensek et al., 2020)

Lactobacillales

Aerococcaceae

Abiotrophia

sp.

(Dowd et al., 2008)

Aerococcus

suis; urinaeequi

(Dowd et al., 2008; Holman et al., 2022)

Globicatella

sp.

(Dowd et al., 2008)

Carnobacteriaceae

Carnobacterium

sp.

(Dowd et al., 2008; Tan et al., 2017)

Granulicatella

sp.

(Dowd et al., 2008; Tan et al., 2017)

Enterococcaceae

Enterococcus

cecorum; faecalis; faecium; gallinarum; hirae

(Dowd et al., 2008; Holman et al., 2022; Wylensek et al., 2020)

Tetragenococcus

sp.

(Dowd et al., 2008)

Vagococcus

teuberi

(Wang et al., 2019)

Lactobacillaceae

Lactobacillus

acidophilus; agilis; amylophilus; amylovorus; animalis; backii; crispatus; delbrueckii; equicursoris; fermentum; gallinarum; helveticus; ingluviei; johnsonii; kitasatonis; mucosae; paralimentarius; pasteurii; plantarum; porci; reuteri; ruminis; salivarius

(Robinson et al. 1981, 2005; Pryde et al., 1999; Leser et al., 2002; Li et al., 2003; Hill et al., 2005; Dowd et al., 2008; Dai et al. 2010; Li and Young, 2013; Kelly et al., 2017; Quan et al., 2018; Tan et al., 2017; Wylensek et al., 2020; Gaio et al., 2021; Liu et al., 2021; Holman et al., 2022)

Ligilactobacillus

agilis; animalis; salivarius; ruminis

(Holman et al., 2022)

Limosilactobacillus

coleohominis; mucosae; reuteri; vaginalis

(Holman et al., 2022)

Oenococcus

oeni

(Tan et al., 2017)

Pediococcus

damnosus

(Hill et al., 2005; Tan et al., 2017)

Weissella

sp.

(Dowd et al., 2008)

Streptococcaceae

Lactococcus

garvieae; lactis

(Dowd et al., 2008; Li and Young, 2013; Ortiz Sanjuán et al., 2022)

Streptococcus

alactolyticus; anginosus; constellatus; criceti; equinus; faecium; gallolyticus; hyointestinalis; hyovaginalis; infantarius; intermedius; lutetiensis; macedonicus; orisratti; pasteurianus; pneumoniae; pyogenes; suis; thermophilus; vestibularis

(Robinson et al. 1981, 2005; Dowd et al., 2008; Dai et al., 2010; Li and Young, 2013; Quan et al., 2018; Tan et al., 2017; Wang et al., 2019; Wylensek et al., 2020; Liu et al., 2021; Holman et al., 2022)

Bacillota sensu stricto incertae sedis³

Order?

Family?

Negativibacillus

massiliensis

(Holman et al., 2022)

Clostridia

Eubacteriales

Anaerovoracaceae

Genus?

sp.

(Reyer, Henry, et al., 2021)

Cellulosilyticaceae

Cellulosilyticum

sp.

(Gao et al., 2023)

Christensenellaceae

Catabacter

hongkongensis

(Tan et al., 2017)

Christensenella

minuta

(Tan et al., 2017)

Clostridiaceae

Butyricicoccus

porcorum; pullicaecorum

(Tan et al., 2017; Holman et al., 2022)

Clostridium

asparagiforme; beijerinckii; bolteae; botulinum; butyricum; cadaveris; celerecrescens; cellulosi; citroniae; clostridioforme; cochlearium; difficile; indolis; innocuum; methylpentosum; perfringens; porci; saccharolyticum; scindens; sphenoides; sporosphaeroides; symbiosum

(Pryde et al., 1999; Leser et al., 2002; Dowd et al., 2008; Isaacson and Kim, 2012; Quan et al., 2018, 2020; Wylensek et al., 2020; Holman et al., 2022)

Hungatella

hathewayi

(Tan et al., 2017; Holman et al., 2022)

Natronincola

sp.
(Dowd et al., 2008)
Oxobacter
sp.
(Leser et al., 2002)
Paraclostridium
sp.
(Wylensek et al., 2020)
Sarcina
maxima
(Leser et al., 2002; Dowd et al., 2008)
Desulfitobacteriaceae
Desulfitobacterium
sp.
(Leser et al., 2002)
Syntrophobotulus
sp.
(Leser et al., 2002)
Desulfitomaculaceae
Desulfitomaculum
sp.
(Leser et al., 2002)
Pelotomaculum
sp.
(Tan et al., 2017)
Eubacteriaceae
Eubacterium

brachy; callanderi; coprostanoligenes; hallii; innocuum; limosum; plexicaudatum; pyruvativorans; ramulus; rectale; xylanophilum

(Robinson et al. 1981; Pryde et al., 1999; Leser et al., 2002; Dowd et al., 2008; Tan et al., 2017; Liu et al., 2021; Ortiz Sanjuán et al., 2022; Holman et al., 2022)

Pseudoramibacter

sp.

(Leser et al., 2002)

Eubacteriales incertae sedis³

Gemmiger

formicilis

(Liu et al., 2021; Holman et al., 2022)

Intestinimonas

butyriciproducens; massiliensis

(Tan et al., 2017; Holman et al., 2022; Ortiz Sanjuán et al., 2022)

Eubacteriales Family XII. Incertae Sedis

Acidaminobacter

sp.

(Leser et al., 2002)

Eubacteriales Family XIII. Incertae Sedis

Anaerovorax

sp.

(Gao et al., 2023)

Emergencia

sp.

(Holman et al., 2022)

Mogibacterium

sp.

(Wylensek et al., 2020)

Lachnospiraceae

Acetitomaculum

sp.

(Leser et al., 2002)

Agathobacter

sp.

(Holman et al., 2022)

Anaerobutyricum

soehngenii

(Wylensek et al., 2020; Holman et al., 2022)

Anaerostipes

caccae; hadrus

(Tan et al., 2017; Holman et al., 2022; Ortiz Sanjuán et al., 2022)

Anaerotignum

sp.

(Holman et al., 2022)

Bariatricus

sp.

(Holman et al., 2022)

Bilifractor

sp.

(Holman et al., 2022)

Blautia

hansenii; hydrogenotrophica; massiliensis; obeum; producta; schinkii; wexlerae

(Tan et al., 2017; Holman et al., 2022; Ortiz Sanjuán et al., 2022)

Butyribacter

sp.

(Holman et al., 2022)

Butyrivibrio

crossotus; fibrisolvens; hungatei; proteoclasticus

(Robinson et al. 1981; Leser et al., 2002; Holman et al., 2022; Ortiz Sanjuán et al., 2022)

Coprococcus

catus; comes; eutactus; nexilis

(Leser et al., 2002; Tan et al., 2017; Liu et al., 2021; Holman et al., 2022)

Cuneatibacter

sp.

(Holman et al., 2022)

Dorea

formicigenerans; longicatena

(Dowd et al., 2008; Tan et al., 2017; Holman et al., 2022)

Eisenbergiella

sp.

(Holman et al., 2022)

Enterocloster

aldenensis; clostridioformis

(Holman et al., 2022)

Epulopiscium

sp.

(Leser et al., 2002)

Faecalicatena

contorta; faecis; glycyrrhizinilyticum; gnavus; lactaris; orotica; torques

(Gaio et al., 2021)

Faecalimonas

umbilicate

(Holman et al., 2022)

Fusicatenibacter

saccharivorans
(Holman et al., 2022)

Johnsonella
sp.
(Leser et al., 2002)

Kineothrix
sp.
(Holman et al., 2022)

Lachnoanaerobaculum
saburreum
(Tan et al., 2017)

Lachnobacterium
sp.
(Dowd et al., 2008)

Lachnoclostridium
mordavella; *phocaeense*; *phytofermentans*
(Tan et al., 2017; Wylensek et al., 2020; Liu et al., 2021; Ortiz Sanjuán et al., 2022)

Lachnospira
sp.
(Dowd et al., 2008; Holman et al., 2022)

Marvinbryantia
sp.
(Holman et al., 2022)

Mediterraneibacter
faecis
(Holman et al., 2022)

Muricomes
sp.

(Holman et al., 2022)
Oribacterium
sp.
(Holman et al., 2022)
Parasporobacterium
sp.
(Dowd et al., 2008)
Pseudobutyrvibrio
ruminis
(Leser et al., 2002)
Roseburia
faecis; hominis; intestinalis; inulinivorans
(Dowd et al., 2008; Kelly et al., 2017; Tan et al., 2017; Liu et al., 2021; Holman et al., 2022; Ortiz Sanjuán et al., 2022)
[Ruminococcus]
gnavus; lactaris; torques
(Holman et al., 2022)
Schaedlerella
sp.
(Holman et al., 2022)
Sporofaciens
sp.
(Holman et al., 2022)
Stomatobaculum
longum
(Tan et al., 2017)
Velocimicrobium
porci

(Wylensek et al., 2020)

Weimeria

sp.

(Holman et al., 2022)

Oscillospiraceae

Acetivibrio

ethanolgignens

(Dowd et al., 2008; Tan et al., 2017)

Agathobaculum

butyriciproducens

(Tan et al., 2017; Holman et al., 2022)

Anaerofilum

sp.

(Leser et al., 2002)

Anaerotruncus

sp.

(Tan et al., 2017)

Angelakisella

sp.

(Gaio et al., 2021)

Dysosmobacter

sp.

(Gaio et al., 2021; Holman et al., 2022)

Flavonifractor

plautii

(Holman et al., 2022; Ortiz Sanjuán et al., 2022)

Faecalibacterium

prausnitzii

(Dowd et al., 2008; Kelly et al., 2017; Tan et al., 2017; Liu et al., 2021; Holman et al., 2022)

Fournierella

excrementarium

(Holman et al., 2022)

Lawsonibacter

sp.

(Holman et al., 2022)

Monoglobus

sp.

(Holman et al., 2022)

Oscillibacter

ruminantium; valericigenes

(Tan et al., 2017)

Oscillospira

sp.

(Dowd et al., 2008)

Pseudoflavonifractor

capillosus

(Holman et al., 2022)

Pygmaibacter

sp.

(Holman et al., 2022)

Ruminococcus

bromii; callidus; champanellensis; flavefaciens; gauthreauii

(Pryde et al., 1999; Leser et al., 2002; Dowd et al., 2008; Quan et al., 2020; Tan et al., 2017; Liu et al., 2021; Holman et al., 2022)

Ruthenibacterium

lactatiformans

(Hu et al., 2022)

Sporobacter

sp.

(Leser et al., 2002)

Subdoligranulum

variabile

(Liu et al., 2021; Holman et al., 2022)

Peptococcaceae

Peptococcus

sp.

(Leser et al., 2002)

Peptostreptococcaceae

Clostridioides

difficile

(Quan et al., 2020)

Intestinibacter

sp.

(Holman et al., 2022)

Peptostreptococcus

anaerobius

(Robinson et al. 1981; Pryde et al., 1999; Dowd et al., 2008; Tan et al., 2017)

Romboutsia

sp.

(Quan et al., 2020; Wang et al., 2019; Holman et al., 2022)

Terrisporobacter

ilealis; timonensis

(Liu et al., 2021; Holman et al., 2022)

Erysipelotrichia

Erysipelotrichales

Coprobacillaceae

Catenibacterium

mitsuokai

(Dowd et al., 2008; Holman et al., 2022)

Erysipelatoclostridium

ramosum

(Holman et al., 2022)

Sharpea

sp.

(Wylensek et al., 2020)

Erysipelotrichaceae

Absicoccus

porci

(Holman et al., 2022)

Allobaculum

stercoricanis

(Tan et al., 2017)

Bulleidia

sp.

(Dowd et al., 2008; Holman et al., 2022)

Catenisphaera

sp.

(Gao et al., 2023)

Faecalicoccus

pleomorphus

(Holman et al., 2022)

Faecalibaculum

rodentium

(Ortiz Sanjuán et al., 2022)

Faecalitalea

cylindroides; pleomorphus

(Tan et al., 2017; Wylensek et al., 2020)

Floccifex

porci

(Holman et al., 2022)

Holdemanella

biformis; porci

(Gaio et al., 2021; Holman et al., 2022)

Holdemania

sp.

(Leser et al., 2002)

Solobacterium

moorei

(Gaio et al., 2021)

Turicibacteraceae

Turicibacter

sanguinis

(Dowd et al., 2008; Wang et al., 2019; Quan et al., 2020)

Negativicutes

Acidaminococcales

Acidaminococcaceae

Acidaminococcus

fermentans

(Leser et al., 2002; Dowd et al., 2008; Dai et al. 2010; Tan et al., 2017; Wylensek et al., 2020; Ortiz Sanjuán et al., 2022)

Phascolarctobacterium

succinatutens

(Leser et al., 2002; Tan et al., 2017; Gaio et al., 2021; Holman et al., 2022)

Succiniclasicum

sp.

(Leser et al., 2002; Holman et al., 2022)

Selenomonadales

Selenomonadaceae

Mitsuokella

jalaludinii

(Holman et al., 2022)

Pectinatus

sp.

(Leser et al., 2002)

Selenomonas

bovis; ruminantium

(Robinson et al., 1981; Pryde et al., 1999; Isaacson and Kim, 2012; Tan et al., 2017; Liu et al., 2021; Holman et al., 2022)

Sporomusaceae

Sporomusa

sp.

(Leser et al., 2002)

Veillonellales

Veillonellaceae

Caecibacter

massiliensis

(Wylensek et al., 2020; Holman et al., 2022)

Dialister

succinatiphilus

(Leser et al., 2002)

Megasphaera

elsdenii; hexanoica

(Wylensek et al., 2020; Holman et al., 2022)

Veillonella

atypica; caviae; seminalis

(Li et al., 2003; Dowd et al., 2008; Tan et al., 2017)

Tissierellia

Tissierellales

Peptoniphilaceae

Anaerovibrio

lipolytica; slackiae

(Dowd et al., 2008; Dai et al. 2010; He et al., 2016; Wylensek et al., 2020; Holman et al., 2022)

Anaerococcus

sp.

(Dowd et al., 2008)

Finegoldia

magna

(Dowd et al., 2008)

Parvimonas

sp.

(Holman et al., 2022)

Peptoniphilus
sp.
(Dowd et al., 2008)
Sporanaerobacteraceae
Anaerosalibacter
bizertensis
(Wylensek et al., 2020)
Tissierellia incertae sedis³
Ezakiella
sp.
(Holman et al., 2022)

Bacteroidota (Bacteroidetes)

Bacteroidia

Bacteroidales

Bacteroidaceae

Bacteroides

caecimuris; dorei; eggerthii; fragilis; helcogenes; heparinolyticus; ovatus; pyogenes; salanitronis; stercoris; thetaiotaomicron; uniformis; vulgatus; xylanisolvans
(Robinson et al., 1981; Pryde et al., 1999; Leser et al., 2002; Dowd et al., 2008; Wylensek et al., 2020; Holman et al., 2022; Ortiz Sanjuán et al., 2022)

Phocaeicola

plebeius; vulgatus
(Holman et al., 2022)

Barnesiellaceae

Barnesiella

intestinihominis; viscericola
(Yang et al., 2017)

Dysgonomonadaceae

Butyricimonas

virosa

(Holman et al., 2022)

Fermentimonas

caenicola

(Tan et al., 2017)

Odoribacter

sp.

(Holman et al., 2022)

Proteiniphilum

saccharofermentans

(Yang et al., 2017)

Muribaculaceae

Duncaniella

sp.

(Kim et al., 2023)

Paludibacteraceae

Paludibacter

sp.

(Kim et al., 2023)

Porphyromonadaceae

Porphyromonas

sp.

(Leser et al., 2002; Tan et al., 2017; Holman et al., 2022)

Prevotellaceae

Alloprevotella

sp.

(Quan et al., 2018)

Hallella

seregens

(Tan et al., 2017)

Paraprevotella

sp.

(Quan et al., 2020)

Prevotella

copri; dentalis; enoeca; fusca; intermedia; jejuni; melaninogenica; nigrescens; oralis; ruminicola

(Leser et al., 2002; Isaacson and Kim, 2012; Kelly et al., 2017; Zhang et al., 2018; Tan et al., 2017; Quan et al., 2020; Wylensek et al., 2020; Ortiz Sanjuán et al., 2022)

Rikenellaceae

Alistipes

senegalensis; shahii

(Quan et al., 2020; Liu et al., 2021; Holman et al., 2022)

Rikenella

sp.

(Leser et al., 2002)

Tannerellaceae

Parabacteroides

distasonis; faecavium; merdae

(Quan et al., 2020; Wylensek et al., 2020; Holman et al., 2022)

Tannerella

sp.

(Tan et al., 2017)

Marinilabiliales

Marinifilaceae

Marinifilum

sp.

(Bai et al., 2021)

Cytophagia

Cytophagales

Cytophagaceae

Cytophaga

sp.

(Leser et al., 2002)

Flexibacteraceae

Flexibacter

sp.

(Leser et al., 2002)

Flavobacteriia

Flavobacteriales

Weeksellaceae

Bergeyella

sp.

(Dowd et al., 2008)

Chryseobacterium

gallinarum

(Dowd et al., 2008; Ortiz Sanjuán et al., 2022)

Campylobacterota

Epsilonproteobacteria

Campylobacterales

Campylobacteraceae

Campylobacter

coli; hominis; lanienae; jejuni

(Dowd et al., 2008; Kelly et al., 2017; Holman et al., 2022)

Helicobacteraceae

Helicobacter

bilis; mustelae; trogontum

(Dowd et al., 2008; Kelly et al., 2017; Tan et al., 2017; Holman et al., 2022)

Chlamydiota

Chlamydiia

Chlamydiales

Chlamydiaceae

Chlamydia

suis; trachomatis

(Quan et al., 2020; Tan et al., 2017; Liu et al., 2021; Holman et al., 2022)

Cyanobacteriota (Cyanobacteria or Cyanophyta)

Cyanophyceae

Oscillatoriales

Microcoleaceae

Microcoleus

sp.

(Yang et al., 2017)

Deferribacterota

Deferribacteres

Deferribacterales

Flexistipitaceae

Flexistipes

sp.

(Leser et al., 2002)

Mucispirillaceae

Mucispirillum

faecigallinarum

(Holman et al., 2022)

Elusimicrobiota (Termite Group 1)

Elusimicrobia

Elusimicrobiales

Elusimicrobiaceae

Elusimicrobium ?

sp.

(Holman et al., 2022)

Fibrobacterota

Fibrobacteria

Fibrobacterales

Fibrobacteraceae

Fibrobacter

intestinalis; succinogenes

(Dowd et al., 2008; Wylensek et al., 2020; Ortiz Sanjuán et al., 2022)

Hallerella

sp.

(Holman et al., 2022)

Fusobacteriota

Fusobacteriia

Fusobacteriales

Fusobacteriaceae

Fusobacterium

mortiferum; necrophorum; perfoetens; varium

(Robinson et al. 1981; Gaskins 2001; Leser et al., 2002; Dowd et al., 2008; Wylensek et al., 2020)

Leptotrichiaceae

Leptotrichia

buccalis

(Robinson et al. 1981; Dowd et al., 2008)

Gemmatimonadota

Gemmatimonadetes

Gemmatimonadales

Gemmatimonadaceae

Gemmatimonas

aurantiaca

(Yang et al., 2017)

Lentisphaerota (Lentisphaerae)

Lentisphaeria

Victivallales

Victivallaceae

Victivallis
vadensis
(Holman et al., 2022)

Mycoplasmatota (Tenericutes)

Mollicutes

Acholeplasmatales

Acholeplasmataceae

Acholeplasma

sp.

(Leser et al., 2002)

Anaeroplasmatales

Anaeroplasmataceae

Anaeroplasma

sp.

(Holman et al., 2022)

Asteroleplasma

sp.

(Dowd et al., 2008; Holman et al., 2022)

Entomoplasmatales

Spiroplasmataceae

Spiroplasma

sp.

(Dowd et al., 2008)

Mycoplasmatales

Mycoplasmataceae

Mycoplasma

sp.

(Leser et al., 2002; Tan et al., 2017; Liu et al., 2021)

Planctomycetota (Planctomycetes)

Planctomycetia

Planctomycetales

Planctomycetaceae

Planctomyces

sp.

(Leser et al., 2002)

Pseudomonadota (Proteobacteria)

Alphaproteobacteria

Hyphomicrobiales

Beijerinckiaceae

Beijerinckia

indica

(Yang et al., 2017)

Methylocapsa

acidiphila

(Yang et al., 2017)

Nitrobacteraceae

Nitrobacter

hamburgensis; winogradskyi

(Yang et al., 2017)

Rhodopseudomonas

sp.

(Dowd et al., 2008)

Parvibaculaceae

Parvibaculum

lavamentivorans

(Yang et al., 2017)

Rhizobiaceae

Allorhizobium

sp.

(Yang et al., 2017)

Ensifer

sp.

(Dowd et al., 2008)

Neorhizobium

galegae

(Yang et al., 2017)

Pararhizobium

sp.

(Yang et al., 2017)

Rhizobium

oryzae

(Yang et al., 2017)

Xanthobacteraceae

Starkeya

novella

(Yang et al., 2017)

Rhodobacterales

Paracoccaceae

Rhodobacter

sp.
(Dowd et al., 2008)

Rhodovulum

sp.
(Dowd et al., 2008)

Rhodospirillales

Azospirillaceae

Azospirillum

brasiliense; lipoferum
(Yang et al., 2017)

Sphingomonadales

Sphingomonadaceae

Sphingobium

sp.
(Tan et al., 2017)

Sphingomonas

sp.
(Li et al., 2019)

Betaproteobacteria

Burkholderiales

Comamonadaceae

Alicyclophilus

denitrificans
(Yang et al., 2017)

Aquabacterium

sp.
(Yin et al., 2018)

Comamonas

kerstersii; testosteroni

(Yang et al., 2017; Wang et al., 2019)

Sutterellaceae

Mesosutterella

sp.

(Holman et al., 2022)

Sutterella

parvirubra; wadsworthensis

(Holman et al., 2022)

Neisseriales

Neisseriaceae

Neisseria

perflava

(Holman et al., 2022)

Oxalobacteraceae

Massilia

sp.

(Li et al., 2019)

Oxalobacter

formigenes

(Tan et al., 2017)

Rhodocyclales

Rhodocyclaceae

Genus?

sp.

(Reddy et al., 2021)

Zoogloeaceae

Thauera

selenatis

(Tan et al., 2017)

Gammaproteobacteria

Aeromonadales

Succinivibrionaceae

Anaerobiospirillum

succiniciproducens

(Holman et al., 2022)

Succinivibrio

dextrinosolvens

(Dai et al., 2010)

Alteromonadales

Idiomarinaceae

Idiomarina

sp.

(Yang et al., 2017)?

Enterobacterales

Enterobacteriaceae

Citrobacter

rodentium

(Ortiz Sanjuán et al., 2022)

Enterobacter

asburiae

(Isaacson and Kim, 2012)

Escherichia

coli; fergusonii; flexneri

(Leser et al., 2002; Dai et al., 2010; Kelly et al., 2017; Wylensek et al., 2020; Tan et al., 2017; Wang et al., 2019; Gaio et al., 2021; Holman et al., 2022)

Klebsiella

pneumoniae

(Dai et al., 2010; Wang et al., 2019)

Pluralibacter

gergoviae

(Tan et al., 2017)

Salmonella

enterica

(Wang et al., 2019; Dowd et al., 2008)

Shigella

boydii; sonnei

(Li et al., 2003)

Hafniaceae

Hafnia

alvei

(Li and Young, 2013)

Morganellaceae

Photorhabdus

luminescens

(Tan et al., 2017)

Morganella

morganii

(Li and Young, 2013)

Vibrionaceae

Vibrio

sp.
(Mukhopadhyaya et al., 2012)

Yersiniaceae

Serratia

marcescens

(Tan et al., 2017)

Moraxellales

Moraxellaceae

Acinetobacter

sp.

(Dowd et al., 2008; Tan et al., 2017)

Pasteurellales

Pasteurellaceae

Actinobacillus

porcinus

(Holman et al., 2022)

Haemophilus

parainfluenzae; pittmaniae

(Tan et al., 2017)

Pasteurella

bettyae

(Tan et al., 2017)

Pseudomonadales

Pseudomonadaceae

Pseudomonas

putida

(Leser et al., 2002; Dai et al., 2010; Tan et al., 2017)

Xanthomonadales

Xanthomonadaceae

Stenotrophomonas

sp.

(Dowd et al., 2008)

Spirochaetota

Spirochaetia

Sphaerochaetales

Sphaerochaetaceae

Bullifex

porci

(Holman et al., 2022)

Spirochaetales

Spirochaetaceae

Spirochaeta

sp.

(Dowd et al., 2008; Tan et al., 2017; Wylensek et al., 2020)

Treponemataceae

Treponema

berlinense; brennaborensis; bryantii; porcinum; succinifaciens; vincentii

(Leser et al., 2002; Nordhoff et al., 2005; Quan et al., 2020; Wylensek et al., 2020; Liu et al., 2021; Holman et al., 2022)

Synergistota

Synergistia

Synergistales

Acetomicrobiaceae

Acetomicrobium

Anaerobaculum

(Leser et al., 2002)

Dethiosulfovibrionaceae

Pyramidobacter

sp.

(Wylensek et al., 2020; Holman et al., 2022)

Synergistaceae

Cloacibacillus

porcorum

(Wang et al., 2019; Wylensek et al., 2020; Holman et al., 2022)

Thermodesulfobacteriota

Desulfovibrionia

Desulfovibrionales

Desulfovibrionaceae

Bilophila

wadsworthia

(Gaio et al., 2021; Holman et al., 2022)

Desulfovibrio

piger; porci

(Wylensek et al., 2020)

Lawsonia

intracellularis

(Quan et al., 2020)

Desulfuromonadia

Geobacterales

Geobacteraceae

Geobacter

soli

(Tan et al., 2017)

Verrucomicrobiota

Verrucomicrobiota (Verrucomicrobia)

Verrucomicrobiales

Akkermansiaceae

Akkermansia

muciniphila

(Holman et al., 2022)

¹ It is better to read this table in “Web Layout” view and with “Navigation Pane” open for a quick navigation. For each taxonomical level (Phylum, Class, Order, Family, Genus, or Species), the names are listed in the alphabetic order. Each of the levels (except for the Species level) can be collapsed or expanded by hovering your computer-mouse pointer to the immediate left of the level name until a small black triangle showing up, and then clicking on this small black triangle.

² The nomenclature and classification of this table followed the NCBI Taxonomy housed in National Library of Medicine (<https://www.ncbi.nlm.nih.gov/taxonomy>). The words in parentheses after those taxonomic names are the corresponding names previously used, and in fact many of them are currently still in use in the literature.

³ This phrase, *incertae sedis*, indicates that the name associated with it is an uncertain taxonomic rank or name.