

Genome



Bacillus subtilis[Organism]

**Bacillus subtilis****Reference genome:** [Bacillus subtilis subsp. subtilis str. 168](#)Download sequences in FASTA format for [genome](#), [protein](#)Download genome annotation in [GFF](#), [GenBank](#) or [tabular](#) formatBLAST against Bacillus subtilis [genome](#), [protein](#)**All 255 genomes for species:**Browse the [list](#)Download sequence and annotation from [RefSeq](#) or [GenBank](#)Display Settings: [Overview](#)

[Organism Overview](#) ; [Genome Assembly and Annotation report \[255\]](#) ; [Genome Tree report \[194\]](#) ; [Plasmid Annotation Report \[45\]](#)

ID: 665

Bacillus subtilis

Model organism for prokaryotic cell differentiation and development

Lineage: [Bacteria\[24060\]](#); [Firmicutes\[3778\]](#); [Bacilli\[1576\]](#); [Bacillales\[1057\]](#); [Bacillaceae\[467\]](#); [Bacillus\[210\]](#); [Bacillus subtilis group\[12\]](#); [Bacillus subtilis\[1\]](#)

Bacillus subtilis. This organism was one of the first bacteria studied, and was named *Vibrio subtilis* in 1835 and renamed *Bacillus subtilis* in 1872. It is one of the most well characterized bacterial organisms, and is a model system for cell differentiation and development. This soil bacterium can divide asymmetrically, producing [More...](#)

Summary

Sequence data: genome assemblies: 255; sequence reads: 23 (See [Genome Assembly and Annotation report](#))

Statistics: median total length (Mb): 4.13814

median protein count: 4079

median GC%: 43.6

Publications

1. **Bacillus subtilis, the model Gram-positive bacterium: 20 years of annotation refinement.** Borris R, et al. *Microb Biotechnol* 2018 Jan
2. **Genome annotation and comparative genomic analysis of Bacillus subtilis MJ01, a new bio-degradation strain isolated from oil-contaminated soil.** Rahimi T, et al. *Funct Integr Genomics* 2018 Sep
3. **Safety assessment of Bacillus subtilis CU1 for use as a probiotic in humans.** Lefevre M, et al. *Regul Toxicol Pharmacol* 2017 Feb

[More...](#)

Representative (genome information for reference and representative genomes)

Reference genome:

- [Bacillus subtilis subsp. subtilis str. 168](#)

Submitter: [BSNR](#)

Morphology: Gram:Positive, Shape:Bacilli, Motility:Yes

Environment: OxygenReq:Facultative, OptimumTemperature:25-35, TemperatureRange:Mesophilic, Habitat:Terrestrial

Type	Name	RefSeq	INSDC	Size (Mb)	GC%	Protein	rRNA	tRNA	Other RNA	Gene	Pseudogene
Chr	-	NC_000964.3	AL009126.3	4.22	43.5	4,237	30	86	95	4,536	88

Dendrogram (based on genomic BLAST)**External Resources**