Genome assembly SL3.0

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Warning: contaminated
Status: RefSeq GCF_000188115.4 is suppressed

This record was removed because the sequence was determined to be contaminated. Please contact info@ncbi.nlm.nih.gov for further details.

Actions

NCBI RefSeq assembly
GCF_000188115.4 (suppressed) (sequences differ from GenBank assembly)

Submitted GenBank assembly
GCA_000188115.3 (replaced)

Taxon
Solanum lycopersicum (tomato)

Cultivar
Heinz 1706

WGS project
AEKE03

Assembly type
haploid

Submitter
Solanaceae Genomics Project

Date
Apr 18, 2018

Genome notes

NCBI has noted the following for this genome assembly. View definitions

- contaminated

View annotated genes

See in Genome Data Viewer

BLAST the genome

Compare genomes

Assembly statistics

	RefSeq	GenBank
Genome size	827.7 Mb	827.7 Mb
Total ungapped length	746.3 Mb	746.3 Mb
Number of chromosomes	12	12
Number of organelles	2	0
Number of scaffolds	3,148	3,148
Scaffold N50	66.7 Mb	66.7 Mb
Scaffold L50	6	6
Number of contigs	22,702	22,702
Contig N50	133 kb	133 kb
Contig L50	1,333	1,333
GC percent	34	34
Genome coverage	27x	27x
Assembly level	Chromosome	Chromosome
View sequences		view GenBank sequences

Sample details

BioSample ID
SAMN02981290

Description
Sample from Solanum lycopersicum

Submitter
Boyce Thompson Institute for Plant Research

Cultivar
Heinz 1706

GenBank
AEKE00000000.2

Models
Generic

Package
Generic.1.0

View more

Assembly methods

Sequencing technology

454; Sanger; Illumina; SOLiD

Comment

In June 2022 84 sequences were suppressed because they were found to be contaminants.

Assembly method

Newbler v. v2.3; BioNano Irysview v. v2.3

Additional genomes

Browse all Solanum lycopersicum genomes (36)

BioProject

PRJNA119

Sequencing of the tomato genome by the international consortium

Publications

Showing 5 of 89

Physiol Plant 2024

Antioxidant activity and comparative RNA-seq analysis support mitigating effects of an algae-based biostimulant on drought stress in tomato plants

P Cerruti, et al.

Plant Mol Biol 2024

Plant growth Enhancement in Colchicine-Treated Tomato Seeds without Polyploidy Induction

RI Obando-González, et al.

Front Plant Sci 2024

Refining dual RNA-seq mapping: sequential and combined approaches in host-parasitic plant dynamics

C Fruggiero, et al.

Front Plant Sci 2024

Chromosome-scale genome assembly of *Codonopsis pilosula* and comparative genomic analyses shed light on its genome evolution

BZ Chen, et al.

Front Genet 2024

Transcriptomic insights into mycorrhizal interactions with tomato root: a comparative study of short- and long-term post-inoculation responses

M Abdelsattar, et al.

View all 89 in PubMed

Publication list limited to 400 entries

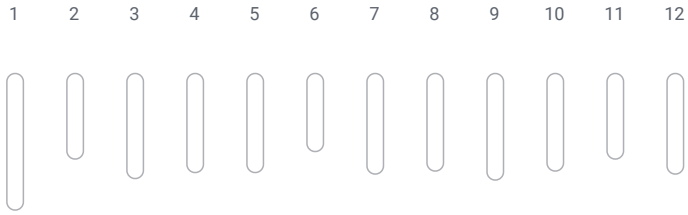
Annotation details

See full annotation report

	RefSeq
Provider	NCBI RefSeq

	RefSeq
Name	Annotation submitted by NCBI RefSeq
Date	Aug 8, 2018
Genes	31,273
Protein-coding	25,613
	View RefSeq annotation

Chromosomes



View chromosomes from: GenBank sequence | RefSeq sequence

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Chromosome	GenBank	RefSeq	Size (bp)	GC content (%)	Unlocalized count	Action
1	CM001064.3	NC_015438.3	98,455,869	34	0	
2	CM001065.3	NC_015439.3	55,977,580	33.5	0	
3	CM001066.3	NC_015440.3	72,290,146	34	0	
4	CM001067.3	NC_015441.3	66,557,038	33.5	0	
5	CM001068.3	NC_015442.3	66,723,567	34	0	
6	CM001069.3	NC_015443.3	49,794,276	34	0	
7	CM001070.3	NC_015444.3	68,175,699	34	0	
8	CM001071.3	NC_015445.3	65,987,440	34	0	
9	CM001072.3	NC_015446.3	72,906,345	34	0	
10	CM001073.3	NC_015447.3	65,633,393	34	0	
11	CM001074.3	NC_015448.3	56,597,135	34	0	
12	CM001075.3	NC_015449.3	68,126,176	34.5	0	

Note: This genome assembly includes 3136 unplaced scaffolds.

RefSeq and GenBank assembly differences

The NCBI RefSeq assembly differs from the submitted assembly in the following ways:

Added chromosomes MT and Pltd

Revision history

GenBank	RefSeq	Name	Level	Date	Action
GCA_000188115.5	n/a	SL4.0	Chromosome	Feb 28, 2025	
GCA_000188115.4	GCF_000188115.5	SL3.1	Chromosome	Apr 18, 2018	
GCA_000188115.3	GCF_000188115.4	SL3.0	Chromosome	Apr 18, 2018	
GCA_000188115.2	GCF_000188115.3	SL2.50	Chromosome	Oct 16, 2014	
GCA_000188115.1	GCF_000188115.2	SL2.40	Chromosome	Feb 8, 2011	
GCA_000188115.1	GCF_000188115.1	SL2.40	Chromosome	Feb 8, 2011	