

Biosafety Clearing-House (BCH)

ORGANISM (ORGA)

BCH-ORGA-SCBD-12081-6

LAST UPDATED: 26 MAY 2018

Organism information

Scientific name

Agrobacterium tumefaciens

Taxonomic Classification

Kingdom Bacteria
Phylum Proteobacteria
Class Alphaproteobacteria
Order Rhizobiales
Family Rhizobiaceae
Genus *Agrobacterium*
Species *tumefaciens*

Alternate scientific name(s) (synonym(s))

Rhizobium radiobacter

Common name(s)

Agrobacterium

EN

Type of organism

Bacteria

Characteristics related to biosafety

Additional Information

Agrobacterium tumefaciens is a species of bacteria that causes tumors (commonly known as 'galls' or 'crown galls') in dicots. This bacterium causes crown gall by inserting a small segment of DNA (known as the T-DNA, for 'transfer DNA') into the plant cell, which is incorporated at a semi-random location into the plant genome.

A. tumefaciens is commonly used as a vector to introduce DNA carried on a plasmid into a recipient organism. The vector is 'disarmed' since it lacks the genes which encode the tumorigenic functions of *A. tumefaciens*. This type of vector has been used frequently for introducing new genes into plants without causing biosafety concerns: the procedures used generally ensure that no *Agrobacterium* remains in the regenerated transgenic plants.

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Other relevant website addresses and/or attached documents

? [Wikipedia - Agrobacterium tumefaciens](#) (*English*)

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Further Information

Questions about the Cartagena Protocol on Biosafety or the operation of the Biosafety Clearing-House may be directed to the Secretariat of the Convention on Biological Diversity.

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on Biological Diversity**

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