

## Biosafety Clearing-House (BCH)

GENETIC ELEMENT (GENE)

BCH-GENE-SCBD-107875-2 EN DE

LAST UPDATED: 13 APR 2015

### General information

Name of genetic element

CoA-transferase beta 2 subunit gene

EN

Abbreviation

CS-ipdB2-RHOE1

EN

Category

Protein coding sequence

Is this genetic element a synthetic molecule?

No

### Donor organism

Donor organism(s)

[BCH-ORGA-SCBD-107871-2](#) ORGANISM | RHODOCOCCLUS EQUI (RHOE1) |

Bacteria

### Characteristics of the protein coding sequence

Name of the protein expressed by the coding sequence

IpdB2 - CoA-transferase beta subunit

EN

Biological function of the protein

The gene ipdB2 (REQ\_00860) is an paralog of idpB of Rhodococcus equi but is localized outside of the cholesterol catabolic gene cluster on the bacterial chromosome. Probably it is the beta subunit of a heterodimeric coenzyme A transferase. The biological function is not elucidated yet but it was shown that the gene product IpdB2 (GenBank accession CBH46239) acts redundantly to IpdB in the cholesterol catabolism that is important for pathogenicity of R. equi.

EN

Related trait(s) or use(s) in biotechnology

Resistance to diseases and pests

Bacteria

## Additional Information

Other relevant website addresses and/or attached documents

? [The steroid catabolic pathway of the intracellular pathogen \*Rhodococcus equi\* is important for pathogenesis and a target for vaccine development](#) ( *English* )

? [CoA-transferase beta subunit - GenBank: CBH46239.1](#) ( *English* )

[BCH-GENE-SCBD-107875-2](#)

## 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.

### **Secretariat of the Convention on Biological Diversity**

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