

Biosafety Clearing-House (BCH)

GENETIC ELEMENT (GENE)

BCH-GENE-SCBD-105184-2

LAST UPDATED: 07 AUG 2014

General information

Name of genetic element

5-enolpyruvylshikimate-3-phosphate synthase gene

EN

Alternate genetic element name(s) (synonym(s))

3-phosphoshikimate 1-carboxyvinyltransferase

EN

Abbreviation

CS-aroA-SALTM

EN

Category

Protein coding sequence

Is this genetic element a synthetic molecule?

No

Donor organism

Donor organism(s)

[BCH-ORGA-SCBD-45768-4](#) ORGANISM | SALMONELLA TYPHIMURIUM (SALTM) |

Bacteria

Characteristics of the protein coding sequence

Name of the protein expressed by the coding sequence

3-phosphoenolpyruvylkimate-5-phosphate synthase

EN

Biological function of the protein

Involved in EPSP biosynthesis. The *aroA* gene, which encodes 5-enolpyruvylshikimate-3-phosphate synthase, an enzyme of the common aromatic biosynthetic pathway, the enzyme participates in biosynthesis of the aromatic amino acids phenylalanine, tyrosine and tryptophan.

EN

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

Changes in quality and/or metabolite content
Protein and amino acids

Additional Information

Other relevant website addresses and/or attached documents

? [5-enolpyruvylshikimate-3-phosphate synthase - Uniprot](#) (*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.

Secretariat of the Convention on Biological Diversity

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