

Biosafety Clearing-House (BCH)

GENETIC ELEMENT (GENE)

BCH-GENE-SCBD-100267-2

LAST UPDATED: 16 JUL 2012

General information

Name of genetic element

delta(12)-fatty acid dehydrogenase

EN

Abbreviation

CS-gm-fad2-1

EN

Category

Protein coding sequence

Is this genetic element a synthetic molecule?

No

Donor organism

Donor organism(s)

[BCH-ORGA-SCBD-10453-6](#) ORGANISM | GLYCINE MAX (SOYBEAN, SOYA BEAN, SOYA, SOYBN) |
Crops

Characteristics of the protein coding sequence

Name of the protein expressed by the coding sequence

delta(12)-fatty acid dehydrogenase

EN

Biological function of the protein

The gm-fad2-1 is a fragment of the omega-6 desaturase gene 1 (FAD2-1) from Glycine max (soybean) that corresponds to approximately 40% of the middle portion of the coding region of FAD2-1 (597 bp).

gm-fad2-1 itself does not code for a functional protein, but transcription of this gene fragment transgenic soybean seeds acts to suppress transcription of endogenous omega-6 desaturase, resulting in the high oleic phenotype.

EN

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

Changes in quality and/or metabolite content
Lipid and fatty acids

Additional Information

Other relevant website addresses and/or attached documents

? [GM Crop Database - CERA](#) (*English*)

? [Delta12-fatty acid dehydrogenase - Wikipedia](#) (*English*)

[BCH-GENE-SCBD-100267-2](#)

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**

413 rue Saint-Jacques, suite 800

Montreal, Québec, H2Y 1N9

Canada

Fax: +1 514 288-6588

Email: secretariat@cbd.int