

INFORME DE BÚSQUEDA DE PATENTES				
N° de solicitud: 14191567				
CRITERIOS PARA LA BÚSQUEDA (Anexar pantallazo o reporte en PDF, junto con los boléanos utilizados*. Para el caso de secuencias, anexar alineamientos)				
Palabras clave utilizadas		Polynucleotide EPSP synthase genes, herbicide resistance, molecules encoding herbicide resistance or tolerance polypeptides.		
CLASIFICACIONES UTILIZADAS PARA LA BÚSQUEDA		CIP: A01H 5/00, C12N 15/29 // 15/82.		
		CPC (Opcional): -		
DOCUMENTOS CONSIDERADOS RELEVANTES (documentos patentes, literatura no patente, etc...)				
Informes/Base de datos	N° de solicitud/ Autor**	Fecha de Publicación/ Presentación (DD/MM/AAAA)	Reiv. afectadas (Con indicación, si procede, de las partes relevantes o números de secuencias)	Categorías especiales de los documentos citados***
SIPI	CO2014/189988	29/08/2014	Rv. 1 a 10 (Pág. 46, Párr. [0141 - 0143] - Pág. 48, Párr. [0150] - Pág. 49, Párr. [0152])	X
EPO (31/08/2015)	DATABASE EMBL "Streptomyces sviveus" ATCC 29083. 3-phosphoshikimate 1-carboxyvinyltransferase. EMBL: EDY54343.	01/06/2010	-	A
	DATABASE EMBL "Amycolatopsis mediterranei" S699. 3-phosphoshikimate 1-carboxyvinyltransferase. EMBL: AEK46452.	01/07/2011	-	A
	Verma et al., 2011. Whole Genome Sequence of the Rifamycin B-Producing Stain Amycolatopsis mediterranei S699.	01/10/2011	-	A
	DATABASE EMBL "Streptomyces pratensis" ATCC 33331. 3-phosphoshikimate 1-carboxyvinyltransferase. EMBL: ADW03091.	26/01/2011	-	A
USPTO (18/09/2015)	US2007300326	27/12/2007	-	A
	US20090093366	09/04/2009	-	A
Patbase*	US20110209246	25/08/2011	-	A
	US20110023179	27/01/2011	-	A
	US20070289035	13/12/2007	-	A
	US20100251432	30/09/2010	-	A
NCBI	SEC ID NO: 1	-	gb EDY54343.1 100% de identidad y cobertura	A
	SEC ID NO: 67	-	ref WP_042498271.1 100% de identidad y cobertura	A
	SEC ID NO: 68	-	ref WP_006127956.1	A

			100% de identidad y cobertura	
NCBI	SEC ID NO: 145	-	ref WP_014153759.1 100% de identidad y cobertura	A
	SEC ID NO: 146	-	ref WP_015660246.1 100% de identidad y cobertura	A
	SEC ID NO: 147	-	emb HE971709.1 100% de identidad y cobertura	A
	SEC ID NO: 148	-	ref WP_006379385.1 100% de identidad y cobertura	A
	SEC ID NO: 150	-	ref WP_010350151.1 100% de identidad y cobertura	A
	SEC ID NO: 152	-	gb EKX63541.1 100% de identidad y cobertura	A
	SEC ID NO: 154	-	ref WP_007452659.1 100% de identidad y cobertura	A
	SEC ID NO: 156	-	ref WP_014048642.1 100% de identidad y cobertura	A
	SEC ID NO: 158	-	ref WP_010061898.1 100% de identidad y cobertura	A
	SEC ID NO: 161	-	emb FR845719.1 100% de identidad y cobertura	A
	SEC ID NO: 162	-	gb EGE41430.1 100% de identidad y cobertura	A
	SEC ID NO: 164	-	ref WP_013229519.1 100% de identidad y cobertura	A
	SEC ID NO: 165	-	gb CP003777.1 100% de identidad y cobertura	A
	SEC ID NO: 166	-	ref WP_014145284.1 100% de identidad y cobertura	A
	SEC ID NO: 168	-	ref WP_014135045.1 100% de identidad y cobertura	A
	SEC ID NO: 169	-	dbj AP010968.1 100% de identidad y cobertura	A
*** Categorías especiales de documentos citados:				
“A” documento que define el estado general de la técnica no considerado como particularmente relevante. “E” solicitud de patente o patente anterior pero publicada en la fecha de presentación internacional o en fecha posterior. “P” documento publicado antes de la fecha de presentación internacional pero con posterioridad a la fecha de prioridad reivindicada.			“X” documento particularmente relevante; la invención reivindicada no puede considerarse nueva o que implique una actividad inventiva por referencia al documento aisladamente considerado. “Y” documento particularmente relevante; la invención reivindicada no puede considerarse que implique una actividad inventiva cuando el documento se asocia a otro u otros documentos de la misma naturaleza, cuya combinación resulta evidente para un experto en la materia.	
**** Indicar entre paréntesis la Autoridad que realizó la búsqueda o el informe preliminar Ejs: EPO, JP, INAPI.				

Fecha del reporte de búsqueda:	18/05/2017
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Búsqueda en PatBase

PatBase

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Search 5: TAC=(((GLYPHOSATE~ AND RESISTANCE~ AND GENES~) AND (EPSPS~)))
Results 154

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#	Search query	Results	Options
5	TAC=(((GLYPHOSATE~ AND RESISTANCE~ AND GENES~) AND (EPSPS~)))	154	View Browse Hits Optimise more...
4	TAC=(((GLYPHOSATE~ AND RESISTANCE~ AND GENES~) AND (HERBICIDE~ AND RESISTANCE~)))	1230	View Browse Hits Optimise more...
3	TAC=(((EPSPS~ AND POLYNUCLEOTIDE~) AND (GLYPHOSATE~ AND RESISTANCE~)))	74	View Browse Hits Optimise more...
2	TAC=(((EPSPS~ AND CLASS~ IV~) AND (HERBICIDE~ AND RESISTANCE~)))	1	View Browse Hits Optimise more...
1	TAC=(((EPSPS~ AND GENES~) AND (HERBICIDE~ AND RESISTANCE~)))	162	View Browse Hits Optimise more...

3) Family number: 11582626 (US6566587B)

Similar • Translate • Full-text • Status • Citations

Title: [EN] MUTATED 5-ENOLPYRUVYLSHIKIMATE-3-PHOSPHATE SYNTHASE, GENE CODING FOR SAID PROTEIN AND TRANSFORMED PLANTS CONTAINING SAID GENE

Abstract: Source: US6566587B [EN] The present invention relates to DNA molecules of plant origin encoding a modified 5-enolpyruvylshikimate-3-phosphate synthase (**EPSPS**) enzyme wherein the a first **EPSPS** coding sequence that normally encodes a threonine residue of a mature **EPSPS** sequence is modified to encode isoleucine of the mature **EPSPS** sequence, and a second **EPSPS** coding sequence that normally encodes a proline residue of a mature **EPSPS** sequence is modified to encode serine of the mature **EPSPS** sequence, wherein the first and second residues are respectively located at relatively positions 102 and 106 of a mature **EPSPS** sequence encoded by said DNA molecule; and the production of a transgenic plant resistant or tolerant to a herbicide of the phosphonomethylglycine family, e.g., **glyphosate**. The mutated enzyme, which substantially maintains the catalytic activity of the wild-type enzyme, allows for increased tolerance or tolerance of the plant to a herbicide of the phosphonomethylglycine family, and allows for the substantially normal growth or development of the plant, its organs, tissues or cells.

Classifications: Classification Explorer

International (IPC 8-9): A01H1/00 A01H5/00 A01M21/04 A01N63/02 C12N15/09 C12N15/29 C12N15/52 C12N15/54 C12N15/82 C12N5/10 C12N9/10 C12N9/12 (Advanced/Invention);
A01H5/00 A01N63/02 C12N15/09 C12N15/54 C12N5/10 C12N9/10 (Advanced/Non-invention);
A01H5/00 A01N63/02 C12N15/00 C12N15/09 C12N15/29 C12N15/54 C12N15/82 C12N5/10 C12N9/10 (Core/Invention)
International (IPC 1-7): A01H1/06 A01H4/00 A01H5/00 A01N63/02 C07H21/04 C12N15/09 C12N15/29 C12N15/54 C12N15/82 C12N5/10 C12N9/10
CPC: C12N9/1092 C12N15/8275
European: C12N15/82C8B4A C12N9/10E19 M12N207/00
US: 435/320.1 435/419 47/58.1 47/58.10R 47/58.1R 536/23.6 800/278 800/287 800/300 800/320.1

Family: Family Explorer

Publication number	Publication date	Application number	Application date	Links
AP886 A	20001103	AP19980001195	19960718	
AP9801195 A0	19980331	AP19980001195	19960718	
AT320494 E	20060415	AT19960130564T	19960718	
AT321866 E	20060415	AT19960925812T	19960718	

PatBase - US6566587_B

Dependent Subclaims

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Informational (pc 8-9): A01H5/00 A01N57/16 C12N15/09 C12N15/54 C12N15/82 C12N5/10 C12N9/10 C12Q1/04 (Advanced/Invention);
 A01H5/00 A01N57/00 C12N15/09 C12N15/54 C12N15/82 C12N5/10 C12N9/10 C12Q1/04 (Core/Invention);
 A01H1 C12N (Subclass/Invention)
Informational (pc 1-3): A01H A01H5/00 A01H100 A01N57/16 C07H21/04 C12N C12N15/09 C12N15/54 C12N15/82 C12N5/04 C12N5/10 C12N9/00 C12N9/10 C12N9/16 C12P21/02 C12P1/04
CPC: C12N9/1092 C12N15/8209 C12N15/8275
European: C12N15/82A8 C12N15/82CB8A C12N9/10E19 M12N207/00
US: 435/183 435/183P 435/196 435/196S 435/320.1 435/320.2 435/320.3 435/410 435/410S 435/410S 435/69.1 435/69.100S 536/23.2 536/23.200S 800/278 800/278P 800/278S 800/320.2 800/320.200S

Publication number	Publication date	Application number	Application date	Links
AR029628 AA	20030710	AR2000P102085	20000428	
AR029748 AA	20030716	AR2000P102087	20000428	  

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Abstract: Source: CN1664095A [EN] The invention discloses a novel 5-enol pyruvyl shikimate3-phosphate (EPSP), the polynucleotide for encoding the EPSP and the method for producing the EPSP through recombination technology. The invention also discloses the use of the polynucleotide for encoding the EPSP.

International (IPC 8-9): C07K14/195 C07K16/40 C12N15/52 C12N15/64 C12N15/82 C12N5/04 C12N9/00 (Advanced/Invention); C07K14/195 C07K16/40 C12N15/52 C12N15/64 C12N15/82 C12N5/04 C12N9/00 (Core/Invention)
International (IPC 1-7): C07K14/195 C07K16/40 C12N15/52 C12N15/64 C12N15/82 C12N5/04 C12N9/00

Publication number	Publication date	Application number	Application date	Links
CN1289664 C	20061213	CN200410016636	20040301	
CN1664095 A	20050907	CN200410016636	20040301	

CN200410016636 20040301

Probable Assignee: BIOTECHNOLOGY RES INST CAAS

Assignee(s): (std): BIOTECHNOLOGY RES INST CAAS; BIOTECHNOLOGY RESEARCH INSTITUTE CAAS

Assignee(s): BIOTECHNOLOGY RESEARCH INST CAAS

Investor(s): (std): LIN MIN; LIN MIN LIU; LIU ZHU; MIN LIN; ZHU LIU

Investor(s): MIN LIU LIN

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Abstract: Source: US2009033366A [EN] The subject invention provides novel pld is that are not only resistant to 2,4-D and other phenoxy auxin herbicides, but also to aryloxyphenoxypropionate herbicides. Hereofore, there was no expectation or suggestion that a plant with both of these advantageous properties could be produced by the introduction of a single gene. The subject invention also includes plants that produce one or more enzymes of the subject invention alone or "stacked" together with another herbicide **resistance** gene, preferably a **glyphosate resistance** gene, so as to provide broader and more robust weed control, and to provide a more robust weed control system. The subject invention also includes plants that produce one or more enzymes of the subject invention in combination with another herbicide **resistance** gene. The subject invention are referred to herein as AAD (aryloxyalkanoate dioxygenase) genes and proteins. No alpha-tetraglutarate-dependent dioxygenase enzyme has previously been reported to have the ability to degrade herbicides of different chemical classes and modes of action. This highly novel discovery is the basis of significant herbicide tolerant crop trait opportunities as well as development of selectable marker technology. The subject invention also includes related methods of producing herbicide resistant plants, and methods of controlling weeds that are resistant (or naturally more tolerant) to one or more herbicides such as **glyphosate**.

The diagram illustrates a chemical pathway for the conversion of phenol to oxalate. It begins with phenol, which is converted into a cyclic intermediate (a six-membered ring with two carbonyl groups and two hydroxyl groups). This intermediate then undergoes a transformation, releasing CO₂ and forming glycidate. Glycidate is further converted into oxalate, a process that involves the addition of CO₂. The overall reaction is summarized as: phenol + glycidate + oxalate + CO₂ → oxalate + CO₂.

Chemical structures shown include phenol, glycidate, oxalate, and a cyclic intermediate. The reaction is catalyzed by an enzyme (labeled 'enzyme' in the diagram).

Legend:

- Addition of CO₂ is anapneustic
- Release of CO₂ is apneustic

Fig. 1

[illegible]

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Abstract: Source: US2006225147A [EN] This invention relates to **glyphosate**-resistant transgenic plants and methods of making the same. In a preferred embodiment, a DNA fragment which comprises an **EPSPS** 5' regulatory sequence and a **glyphosate**-resistant **EPSPS** coding sequence is introduced into regenerable plant cells. The encoded **EPSPS** has a chloroplast transit peptide. The DNA fragment does not contain a non-**EPSPS** enhancer. Cells are selected for stable transformation, and the selected cells can be used to regenerate **glyphosate**-resistant transgenic plants. The DNA fragment used for transformation preferably comprises a modified plant genomic sequence, such as SEQ ID NO: 2, SEQ ID NO:4 or SEQ ID NO: 6. In one embodiment, two DNA fragments of this invention are stably transformed into a plant to confer **glyphosate**-resistance.

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