

Title (en)
HALOARYLNITRILE DEGRADING GENE, ITS USE, AND CELLS CONTAINING THE SAME.

Title (de)
HALOARYLNITRIL ABBAUENDES GEN, DESSEN VERWENDUNG, SOWIE ZELLEN, DIE DIESES ENTHALTEN.

Title (fr)
GENE DECOMPOSANT L'HALOARYLNITRILE, SON UTILISATION ET CELLULES LE CONTENANT.

Publication
EP 0290455 A4 19890118 (EN)

Application
EP 87900941 A 19870105

Priority
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Abstract (en)
[origin: EP0229042A2] Nitrilase enzymes specific for the hydrolysis of the nitrile group of benzonitriles, eg. bromoxynil or ioxynil, nucleotide sequences encoding for such enzymes, and transformed cells in which the nitrilase expression is foreign are provided. The transformed cells are capable of expressing the nitrilase enzyme to provide detoxification of an environment and protect benzonitrile herbicide-sensitive cells from its cytotoxic effect. Plants are developed which are resistant to bromoxynil.

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C07K 7/04; C07K 15/04; C12N 1/00; C12N 9/00; C12N 9/14; C12P 1/00; C12P 1/04; C12P 19/34

IPC 8 full level
A01H 5/00 (2006.01); **C07K 7/04** (2006.01); **C12N 1/00** (2006.01); **C12N 1/20** (2006.01); **C12N 1/21** (2006.01); **C12N 5/00** (2006.01); **C12N 5/10** (2006.01); **C12N 9/00** (2006.01); **C12N 9/14** (2006.01); **C12N 9/78** (2006.01); **C12N 9/88** (2006.01); **C12N 15/00** (2006.01); **C12N 15/09** (2006.01); **C12N 15/63** (2006.01); **C12N 15/64** (2006.01); **C12N 15/70** (2006.01); **C12N 15/82** (2006.01); **C12P 1/00** (2006.01); **C12P 1/04** (2006.01); **C12P 19/34** (2006.01); **E01B 7/22** (2006.01); **E01B 9/36** (2006.01); **E01B 9/38** (2006.01); **C12R 1/19** (2006.01); **C12R 1/22** (2006.01); **C12R 1/91** (2006.01)

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EP 87420005 A 19870107; AU 6717587 A 19870106; AU 6898487 A 19870105; BR 8700045 A 19870108; BR 8705281 A 19870105; CA 526847 A 19870107; CN 87100135 A 19870108; DK 464087 A 19870907; DK 6487 A 19870107; EP 87900941 A 19870105; HU 4487 A 19870107; HU 91187 A 19870105; IL 8116887 A 19870105; JP 1538895 A 19950201; JP 50073887 A 19870105; KR 870000095 A 19870108; KR 870700813 A 19870908; NZ 21881087 A 19870106; PL 26357587 A 19870107; SU 4356722 A 19870907; US 8700044 W 19870105