



(11) **EP 1 362 918 B8**

(12) **CORRECTED EUROPEAN PATENT SPECIFICATION**

(15) Correction information:
Corrected version no 1 (W1 B1)
Corrections, see
Bibliography INID code(s) 30

(51) Int Cl.:
C12N 15/867 ^(2006.01) **C07K 14/78** ^(2006.01)
C12N 15/87 ^(2006.01)

(48) Corrigendum issued on:
05.08.2009 Bulletin 2009/32

(45) Date of publication and mention
of the grant of the patent:
19.11.2008 Bulletin 2008/47

(21) Application number: **03016618.5**

(22) Date of filing: **25.06.1999**

(54) **Gene transfer methods with retroviruses**

Methoden für Gentransfer mit Retroviren

Méthode de transfert génique par des rétrovirus

(84) Designated Contracting States:
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU
MC NL PT SE

(30) Priority: **01.07.1998 JP 18624098**
04.03.1999 JP 5691599

(43) Date of publication of application:
19.11.2003 Bulletin 2003/47

(62) Document number(s) of the earlier application(s) in
accordance with Art. 76 EPC:
99926821.2 / 1 094 114

(73) Proprietor: **TAKARA BIO INC.**
Otsu-shi,
Shiga (JP)

(72) Inventors:
• **Ueno, Mitsuhiro**
Kusatsu-shi,
Shiga 525-0025 (JP)
• **Yoshioka, Hirofumi**
Ritto-shi,
Shiga 520-3026 (JP)
• **Konishi, Haruko,**
407, Gurankoto-Rakuvo
Kyoto-shi,
Kyoto 600-8853 (JP)

- **Hashino, Kimikazu,**
27-3, Akeno-cho
Osaka 596-0082 (JP)
- **Morishita, Mio**
Otsu-shi,
Shiga 520-0246 (JP)
- **Chono, Hideto,**
Shiga 524-0036 (JP)
- **Miyamura, Tsuyoshi,**
103, Hamoparesu-Kusatsu 12-1
kusatsu-shi,
Shiga 525-0025 (JP)
- **Sano, Mutsumi,**
615.Rumon-Nishiotsu
Shiga 520-0014 (JP)
- **Asada, Kiyozo**
Shiga 520-3333 (JP)
- **Fujinaga, Kei**
Sapporo-shi, Hokaido 0640-0941 (JP)
- **Kato, Ikunoshin**
Kyoto 611-0028 (JP)

(74) Representative: **Schnappauf, Georg et al**
Dr. Volker Vossius
Patent- und Rechtsanwaltskanzlei
Geibelstrasse 6
81679 München (DE)

Note: Within nine months of the publication of the mention of the grant of the European patent in the European Patent Bulletin, any person may give notice to the European Patent Office of opposition to that patent, in accordance with the Implementing Regulations. Notice of opposition shall not be deemed to have been filed until the opposition fee has been paid. (Art. 99(1) European Patent Convention).

EP 1 362 918 B8

(56) References cited:

EP-A- 0 531 733

WO-A-92/00524

WO-A-97/18318

US-A- 5 656 456

- PATENT ABSTRACTS OF JAPAN vol. 1997, no. 04, 30 April 1997 (1997-04-30) -& JP 08 317785 A (KANAGAWA KAGAKU GIJUTSU AKAD), 3 December 1996 (1996-12-03)
- SAPPEY ET AL: "Iron chelation decreases NF-kB and HIV type 1 activation due to oxidative stress" AIDS RESEARCH AND HUMAN RETROVIRUSES, MARY ANN LIEBERT, US, vol. 11, no. 9, 1995, pages 1049-1061, XP002104523 ISSN: 0889-2229

- KAPTEIN L.C.M. ET AL: 'Optimized conditions for the production of recombinant amphotropic retroviral vector preparations.' GENE THERAPY vol. 4, 1997, pages 172 - 176
- SANYAL ET AL: 'Increased transduction into early human cord blood progenitor cells by centrifugation enhanced transduction in fibronectin fragment coated tubes.' BLOOD, SUPPL 1 PART 1-2 vol. 92, no. 10, 15 November 1999, page 466A