Efficient production of active form of recombinant cassava hydroxynitrile lyase using *Escherichia coli* in low-temperature culture

Hisashi Semba · Eita Ichige · Tadayuki Imanaka ·
Haruyuki Atomi · Hideki Aoyagi

Published online: 19 July 2008
© Springer-Verlag 2008

Erratum to: Appl Microbiol Biotechnol
DOI 10.1007/s00253-008-1464-8

The original version of this article unfortunately contained a mistake. The positions of the asterisks of Fig. 1 were shifted. The correct version is given here.

The online version of the original article can be found at <http://dx.doi.org/10.1007/s00253-008-1464-8>.

H. Semba (✉) · E. Ichige
Strategic Technology Research Center,
Nippon Shokubai Co., Ltd,
1-25-12, Kannondai,
Tsukuba, Ibaraki 305-0856, Japan
e-mail: hisashi_semba@shokubai.co.jp

T. Imanaka · H. Atomi
Department of Synthetic Chemistry and Biological Chemistry,
Graduate School of Engineering, Kyoto University,
Kyoto 606-8501, Japan

H. Semba · H. Aoyagi
Graduate School of Life and Environmental Sciences,
Tsukuba University,
Tsukuba, Ibaraki 305-8572, Japan

Fig. 1 Codon substitution of MeHNL gene. *Upper*—codon substituted MeHNL sequence (modSHNL-3). *Lower*—natural MeHNL sequence (GeneBank accession no. Z29091). Identical base is indicated by an *asterisk*

1'	ATGGTACTG	CACACTTCGT	TCTGATTCAC	ACCATTGTGC	ACGGCGCATG	GATTTGGCAC
	*****	*****	*****	*****	*****	*****
1"	ATGGTAACTG	CACATTTTGT	TCTGATTCAT	ACCATTTGCC	ATGGTGCATG	GATTTGGCAT
61'	AAACTGAAAC	CGGCCCTGGA	ACGTGCTGGC	CACAAAGTTA	CTGCACTGGA	CATGGCAGCC
	** * *	* * *	* * *	* * *	* * *	* * *
61"	AAGCTCAAAC	CAGCCCTTGA	GAGAGCTGGC	CACAAAGTCA	CTGCACTGGA	CATGGCAGCC
121'	AGTGGCATTG	ACCCGCGTCA	AATTGAACAG	ATCAACTCTT	TCGATGAATA	CTCTGAACCG
	** * *	* * *	* * *	* * *	* * *	* * *
121"	AGCGGCATTG	ACCCAAGGCA	AATTGAGCAG	ATTAATTCAT	TTGATGAATA	CTCTGAACCC
181'	CTGCTGACTT	TCCTGGAAAA	ACTGCCGCAA	GGCGAAAAGG	TTATCATTGT	TGGTGAAAGC
	* * *	* * *	* * *	* * *	* * *	* * *
181"	TTATTGACTT	TCTTGGAGAA	ACTCCCTCAA	GGGGAAAAGG	TCATCATTGT	TGGTGAGAGC
241'	TGTGCAGGCC	TGAACATTGC	TATTGCTGCT	GATCGTTACG	TTGACAAAAT	TGCAGCTGGC
	*****	* * *	* * *	* * *	* * *	* * *
241"	TGTGCAGGGC	TGAATATTGC	TATTGCTGCT	GATAGATACG	TTGACAAAAT	TGCAGCTGGT
301'	GTTTTCCACA	ACTCCCTGCT	GCCGGACACC	GTTACAGCC	CGTCTTACAC	TGTTGAAAAG
	*****	* * *	* * *	* * *	* * *	* * *
301"	GTTTTCCACA	ATTCCCTTATT	GCCAGACACC	GTTCATAGCC	CATCTTACAC	TGTGGAAAAG
361'	CTGCTGGAAT	CGTTCCCGGA	CTGGCGTGAC	ACAGAATATT	TCACGTTTAC	CAACATCACT
	** * *	* * *	* * *	* * *	* * *	* * *
361"	CTTTTGGAGT	CGTTTCCTGA	CTGGAGAGAC	ACAGAGTATT	TTACGTTTAC	TAATATCACT
421'	GGCGAAACCA	TCACTACCAT	GAAACTGGGT	TTCGTTCTGC	TGCGTGAAAA	CCTGTTTACC
	* * *	* * *	* * *	* * *	* * *	* * *
421"	GGAGAGACAA	TTACAACAAT	GAAGCTGGGC	TTCGTACTTC	TGAGGGAAAA	TTATTTTACC
481'	AAATGCACTG	ATGGCGAATA	TGAACTGGCA	AAAAATGGTTA	TGCGCAAGGG	CTCTCTGTTC
	*****	* * *	* * *	* * *	* * *	* * *
481"	AAATGCACTG	ATGGGGGAATA	TGAACTGGCA	AAAAATGGTAA	TGAGGAAGGG	ATCACTGTTT
541'	CAAAACGTTC	TGGCTCAGCG	TCCGAAGTTC	ACTGAAAAAG	GCTACGGCTC	TATCAAGAAA
	*****	* * *	* * *	* * *	* * *	* * *
541"	CAAAATGTTT	TGGCTCAGAG	ACCGAAGTTC	ACCGAAAAAG	GTTACGGATC	AATTAAGAAA
601'	GTTTATATTT	GGACCGATCA	AGACAAAATA	TTCTTGCCGG	ACTTCCAACG	CTGGCAAATT
	*****	* * *	* * *	* * *	* * *	* * *
601"	GTTTATATTT	GGACCGATCA	AGACAAAATA	TTTTTACCAG	ACTTCCAACG	CTGGCAAATT
661'	GCAAACCTACA	AACCGGACAA	GGTTTATCAG	GTTCAAGGCG	GCGATCACAA	GCTGCAGCTG
	*****	* * *	* * *	* * *	* * *	* * *
661"	GCAAACCTACA	AACCAGACAA	GGTTTATCAG	GTTCAAGGTG	GAGATCATAA	GCTCCAGCTT
721'	ACAAAACTG	AAGAAGTAGC	TCACATTCTG	CAAGAAGTTG	CTGATGCATA	CGCTTAA
	*****	* * *	* * *	* * *	* * *	* * *
721"	ACAAAACTG	AGGAGGTAGC	TCATATTCTC	CAAGAGGTGG	CTGATGCATA	TGCTTGA