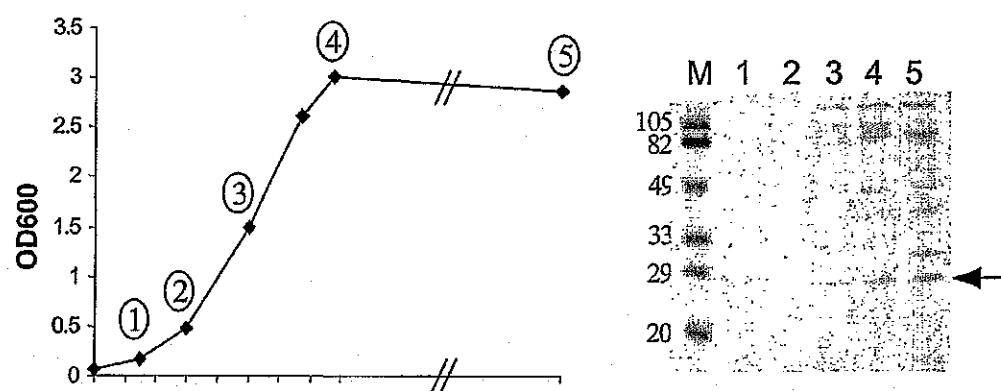


1/12

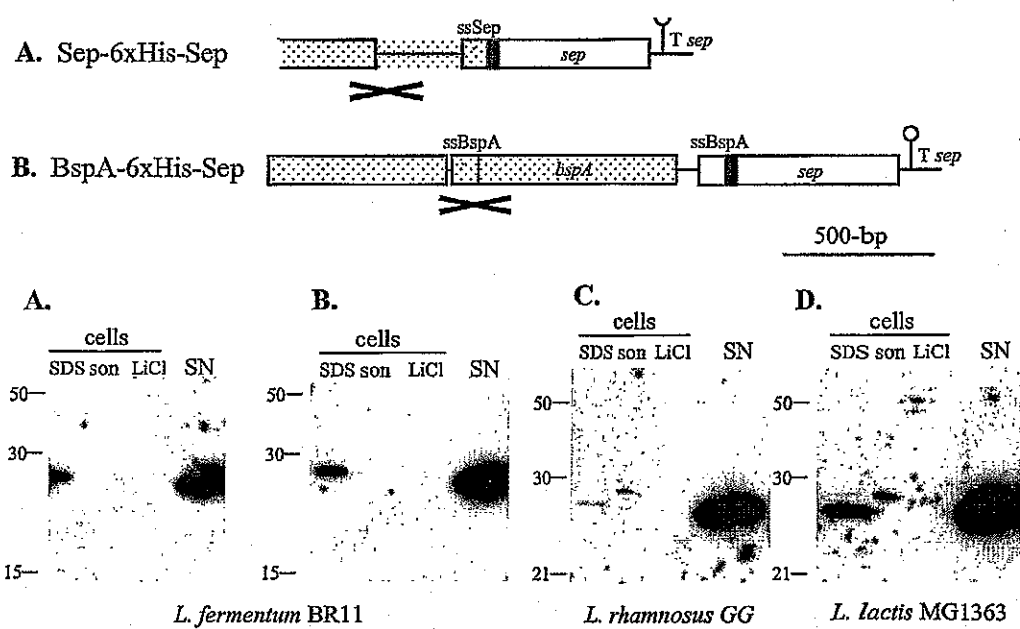
Figure 1.



2/12

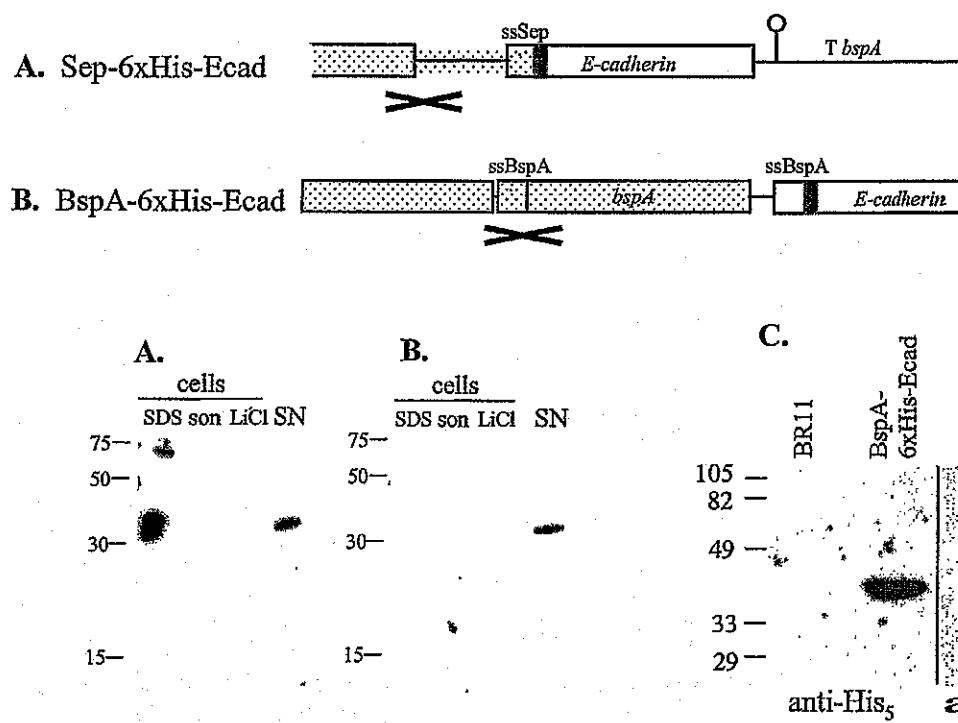
5

Figure 2.



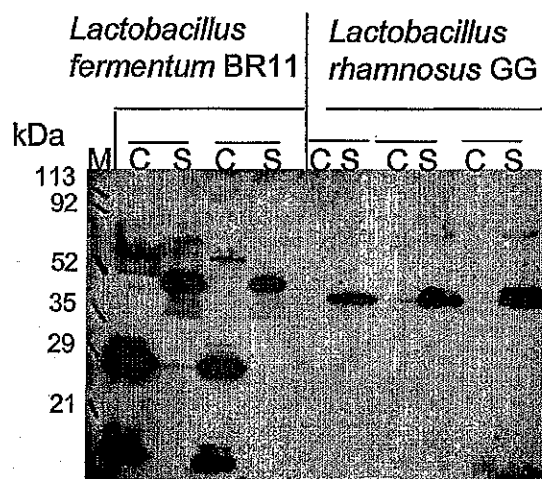
3/12

Figure 3.



4/12

Figure 4.

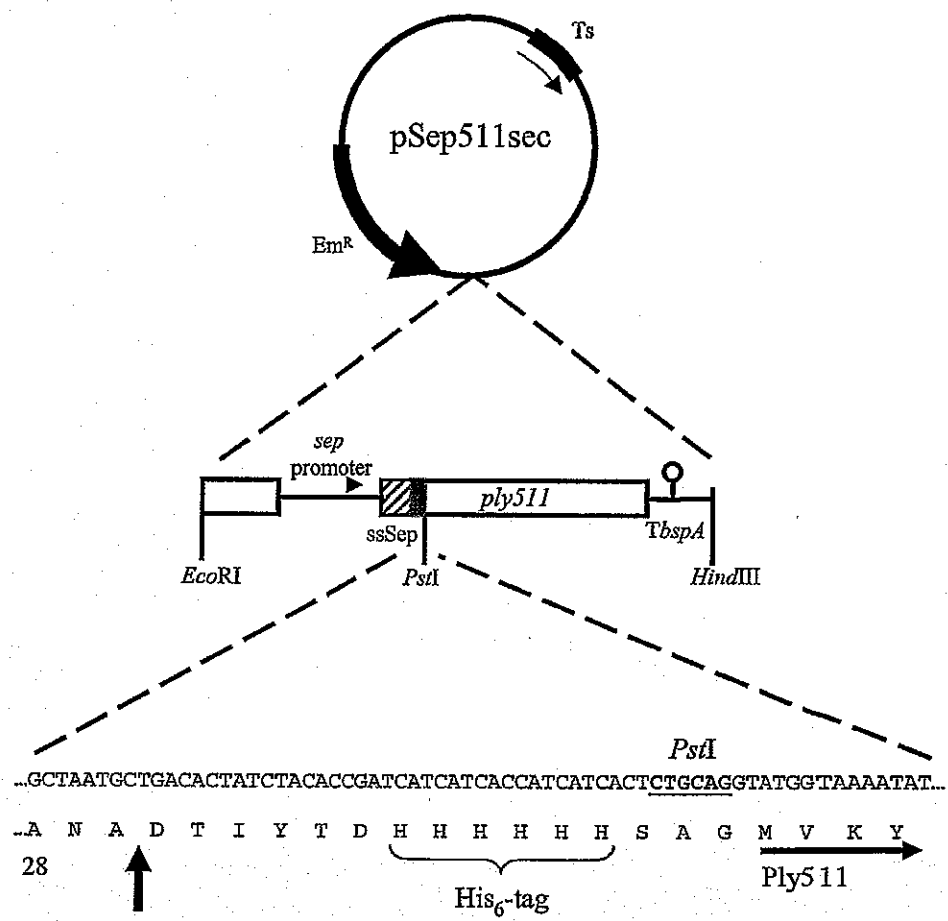


Western blot probed with
anti-His₅ monoclonal
antibody.

C = cell-associated extracts
S = supernatant extracts

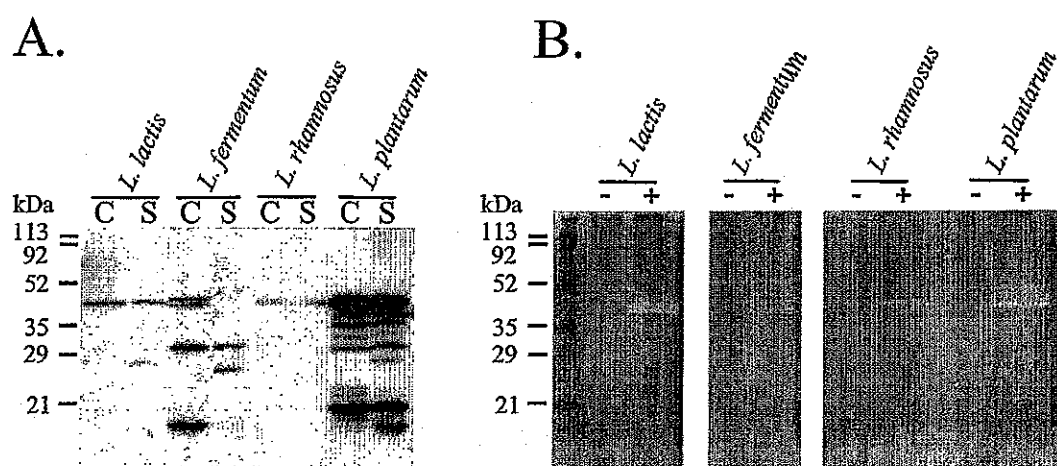
5/12

Figure 5.



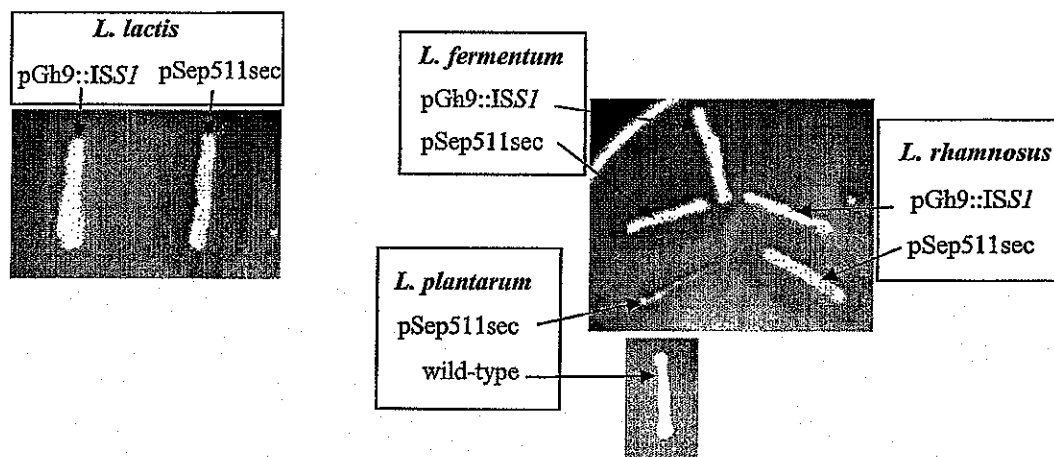
6/12

Figure 6.



7/12

5 Figure 7.



8/12

Figure 8NH₂-

DTIYTVQSGDTLSGISYKFAKDNSMINDLAKKNNIQDINKIFVGQKLIK-COOH

Figure 9

5

NH₂-SYTSNASGSEAAAKAWIAGRESGGNYNATNGQYIGKYQLAASYLGGDYSPANQ
ERVADQYVASRYGSWTAAQQFWQANGWY-COOH**Figure 10**

10

NH₂-SDGEIQEYNAQNAANANVANNNNTQATQQQTAQAQPQQAQSQANQ-
COOH**Figure 11**NH₂-MISKKNFAKVSATLGAVALGVSATATAANA-COOH**Figure 12**NH₂-

15

DTIYTVQSGDTLSGISYKFAKDNSMINDLAKKNNIQDINKIFVGQKLIKSDGEIQE
YNAQNAANANVANNNNTQATQQQTAQAQPQQAQSQANQSYTSNASGSEAAAK
AWIAGRESGGNYNATNGQYIGKYQLAASYLGGDYSPANQERVADQYVASRYGS
WTAAQQFWQANGWY-COOH**Figure 13**

20

NH₂-MISKKNFAKVSATLGAVALGVSATATAANADTIYTVQSGDTLSGISYKFAKDNS
MINDLAKKNNIQDINKIFVGQKLIKSDGEIQEYNAQNAANANVANNNNTQATQQQ
TAQAQPQQAQSQANQSYTSNASGSEAAAKAWIAGRESGGNYNATNGQYIGKYQ
LAASYLGGDYSPANQERVADQYVASRYGSWTAAQQFWQANGWY-COOH

9/12

Figure 14

5'-

ATGATTTCTAAGAAAACTTTGCTAAAGTATCTGCTACTCTTGGTGCAAGTGGC
CTTAGGTGTTAGTGCAACGGCTACTGCTGCTAATGCT-3'

5

Figure 15

5'-

GACACTATCTACACCGTACAAAGTGGTGACACACTTTCAGGTATTTCTTACAA
ATTTGCTAAAGACAACAGTATGATCAATGATCTTGCTAAGAAGAACAATATT
CAAGATATTAACAAGATTTTTGTTGGTCAAAAGTTAATCATCAAG-3'

10

Figure 16

5'-

AGCGATGGTGAAATTCAAGAATACAATGCTCAAAATGCAGCTAATGCAAATG
TAGCAAACAACAATACTCAAGCTACACAACAACAACTGCTCAAGCACAAC
CTCAACAAGCACAAAGCCAAGCTAACCAA-3'

15

Figure 17

5'-

AGCTACACTTCAAATGCTTCAGGTTCAAGCTGCTGCTAAAGCTTGGATTGC
CGGTCGTGAATCAGGTGGTAACTACAACGCCACAAACGGTCAATACATTGGT
AAGTACCAATTAGCTGCATCATACCTTGGTGGTGACTACTCACCAGCTAACC
AAGAACGCGTTGCTGACCAATACGTTGCAAGTCGTTACGGTTCTTGGACTGCT
GCCCAACAATTCTGGCAAGCAAACGGTTGGTACTAA-3'

20

Figure 18

5'-

GACACTATCTACACCGTACAAAGTGGTGACACACTTTCAGGTATTTCTTACAA
ATTTGCTAAAGACAACAGTATGATCAATGATCTTGCTAAGAAGAACAATATT
CAAGATATTAACAAGATTTTTGTTGGTCAAAAGTTAATCATCAAGAGCGATG
GTGAAATTCAAGAATACAATGCTCAAAATGCAGCTAATGCAAATGTAGCAAA
CAACAATACTCAAGCTACACAACAACAACTGCTCAAGCACAACCTCAACAA

25

10/12

GCACAAAGCCAAGCTAACCAAAGCTACACTTCAAATGCTTCAGGTTCAGAAG
CTGCTGCTAAAGCTTGGATTGCCGGTCGTGAATCAGGTGGTAACTACAACGC
CACAAACGGTCAATACATTGGTAAGTACCAATTAGCTGCATCATACCTTGGT
GGTGACTACTCACCAGCTAACCAAGAACGCGTTGCTGACCAATACGTTGCAA
5 GTCGTTACGGTTCTTGGACTGCTGCCCCAACAATTCTGGCAAGCAAACGGTTG
GTACTAA-3'

Figure 19

5'-

ATGATTTCTAAGAAAACTTTGCTAAAGTATCTGCTACTCTTGGTGCAGTGGC
10 CTTAGGTGTTAGTGCAACGGCTACTGCTGCTAATGCTGACACTATCTACACCG
TACAAAGTGGTGACACACTTTCAGGTATTTCTTACAAATTTGCTAAAGACAAC
AGTATGATCAATGATCTTGCTAAGAAGAACAATATTCAAGATATTAACAAGA
TTTTTGTTGGTCAAAAGTTAATCATCAAGAGCGATGGTGAAATTCAAGAATA
CAATGCTCAAAATGCAGCTAATGCAAATGTAGCAAACAACAATACTCAAGCT
15 ACACAACAACAACTGCTCAAGCACAACTCAACAAGCACAAAGCCAAGCT
AACCAAAGCTACACTTCAAATGCTTCAGGTTCAGAAGCTGCTGCTAAAGCTT
GGATTGCCGGTCGTGAATCAGGTGGTAACTACAACGCCACAAACGGTCAATA
CATTGGTAAGTACCAATTAGCTGCATCATACCTTGGTGGTGACTACTCACCAG
CTAACCAAGAACGCGTTGCTGACCAATACGTTGCAAGTCGTTACGGTTCTTG
20 GACTGCTGCCCCAACAATTCTGGCAAGCAAACGGTTGGTACTAA-3'

Figure 20

5'-

ATGATHWSNAARAARAAYTTYGCNAARGTNWSNGCNACNYTNGGNGCNGTN
GCNYTNGGNGTNWSNGCNACNGCNACNGCNGCNAAYGCN-3'

25

Figure 21

5'-

GAYACNATHHTAYACNGTNCARWSNGGNGAYACNYTNWSNGGNATHWSNTA
YAARTTYGCNAARGAYAAAYWSNATGATHAAYGAYYTNGCNAARAARAAYA
AYATHCARGAYATHAAYAARATHHTTYGTNGGNCARAARYTNATHATHAAR-3'

11/12

Figure 22

5'-

WSNGAYGGNGARATHCAR GARTAYAAYGCNCARAAYGCNGCNAAYGCNAA
YGTNGCNAAYAAAYACNCARGCNACNCARCARCACNGCNCARGCNCA
5 RCCNCARCARGCNCARWSNCARGCNAAYCAR-3'

Figure 23

5'-

WSNTAYACNWSNAAYGCNWSNGGNWSNGARGCNGCNGCNAARGCNTGGAT
HGCNGGNMGNGARWSNGGNGGNAAYTAYAAYGCNACNAAYGGNCARTAYA
10 THGGNAARTAYCARYTNGCNGCNWSNTAYYTNGGNGGNGAYTAYWSNCCNG
CNAAYCARGARMGNGTNGCNGAYCARTAYGTNGCNWSNMGNTAYGGNWSN
TGGACNGCNGCNCARCARTTYTGGCARGCNAAYGGNTGGTAY-3'

Figure 24

5'-

15 GAYACNATHTAYACNGTNCARWSNGGNGAYACNYTNWSNGGNATHWSNTA
YAARTTYGCNAARGAYAA YWSNATGATHAAYGAYYTNGCNAARAARAAYA
AYATHCARGAYATHAAYAARATHTTYGTNGGNCARAARYTNATHATHAARW
SNGAYGGNGARATHCARGARTAYAAYGCNCARAAYGCNGCNAAYGCNAAYG
TNGCNAAYAAAYACNCARGCNACNCARCARCACNGCNCARGCNCARC
20 CNCARCARGCNCARWSNCARGCNAAYCARWSNTAYACNWSNAAYGCNWSN
GGNWSNGARGCNGCNGCNAARGCNTGGATHGCNGGNMGNGARWSNGGNGG
NAAYTAYAAYGCNACNAAYGGNCARTAYATHGGNAARTAYCARYTNGCNGC
NWSNTAYYTNGGNGGNGAYTAYWSNCCNGCNAAYCARGARMGNGTNGCNG
AYCARTAYGTNGCNWSNMGNTAYGGNWSNTGGACNGCNGCNCARCARTTYT
25 GGCARGCNAAYGGNTGGTAY-3'

Figure 25

5'-

ATGATHWSNAARAARAAYTTYGCNAARGTNWSNGCNACNYTNGGNGCNGTN
GCNYTNGGNGTNWSNGCNACNGCNAACNGCNGCNAAYGCNGAYACNATHTAY

12/12

ACNGTNCARWSNNGNGAYACNYTNWSNNGNATHWSNTAYAARTTYGCNAA
 RGAYAAYWSNATGATHAAYGAYYTNGCNAARAARAAYAYATHCARGAYA
 THAAYAARATHHTTYGTNGGNCARAARYTNATHATHAARWSNGAYGGNGARA
 THCARGARTAYAAYGCNCARAAYGCNGCNAAYGCNAAYGTNGCNAAYAAYA
 5 AYACNCARGCNCACNCARCARACNGCNCARGCNCARCCNCARCARGCNC
 ARWSNCARGCNAAYCARWSNTAYACNWSNAAYGCNWSNNGNWSNGARGCN
 GCNGCNAARGCNTGGATHGCNGGNMGNGARWSNNGGNGGNAAYTAYAAYGC
 NACNAAYGGNCARTAYATHGGNAARTAYCARYTNGCNGCNWSNTAYYTNGG
 NGGNGAYTAYWSNCCNGCNAAYCARGARMGNGTNGCNGAYCARTAYGTNG
 10 CNWSNMGNTAYGGNWSNTGGACNGCNGCNCARCARTTYTGGCARGCNAAY
 GGNTGGTAY-3'

Figure 26

TAAAGATAGTTATAAACGGAAAATAAAGGGCGGTTTTGGAGCAAATA
 TGAAATTTTTGCGAAGAAATCAGCTTTTTTTATTTATTTTTTTATAAATCATCT
 15 GTAAAAGTTATGCAAACCGAAAACGCAACCCGCACAAGGAATTAGCCGATT
 ATGACTATAATATTTTAAAAGCTATATTACAAAAAGCAAACGGAGAGTAGTA
 AATAGAAAT

-35 -10/-35 -10

GGTGCTGTTACAGCTTTGTAATAATAAGAGTGTAGTATATAGGGTGT
 20 GAAACGGAAAAGATAATTGCTAAATAATAAAGGATGGTTATTTAATTT

Figure 27

-----> <-----

AATAAATAAGATTAATCAATTTTATTGCGAGACTGATGGAATATTATT
 TCCTTCTGTCTCGCTTTTTTGGGCTAATATGTTATAATGGTAGTACTTCTTATG
 25 GGGATGTTTATGGATTTCGACAGGTATAGGTCGAGTTTCAACTGCGTTT