



DOCTORA
EDNA MARCELA RAMÍREZ OROZCO
DIRECTORA NUEVAS CREACIONES
SUPERINTENDENCIA DE INDUSTRIA Y COMERCIO
E. S. D.

REF. EXPEDIENTE No.: NC2020/0009670.
SOLICITUD PATENTE: COMPOSICIONES QUE COMPRENDEN
MICROBIOTA COSELECCIONADA Y
MÉTODOS PARA SU USO
SOLICITANTES: NUBIYOTA LLC.

RESPUESTA A REQUERIMIENTO OFICIAL OFICIO NO. 10025 NOTIFICADO EL
18 DE AGOSTO DE 2020.

CLAUDIA LUCIA CARO RAMIREZ, mayor de edad, domiciliada en Bogotá D.C., identificada con cedula No 40.017.374, en mi condición de apoderada de la sociedad **NUBIYOTA LLC.**, por el presente escrito y estando dentro del término legal para hacerlo, doy respuesta al oficio arriba referenciado, de acuerdo con lo siguiente:

En respuesta al oficio No. 10025, a continuación, encuentran:

- i. Respuesta a los puntos del requerimiento
- Respuesta punto por punto a los requerimientos del examinador.
- ii. Adjunto a este memorial se presenta:
 - Anexo/Apéndice A

1. Documentos referenciados en la descripción.

El examinador solicita allegar el Apéndice A, el cual no fue allegado al momento de la entrada en fase nacional.

Adjunto a este memorial de respuesta se adjunta el documento:

- Anexo/Apéndice A

Por todo lo dicho, solicitamos que la Superintendencia de Industria y Comercio admita los documentos presentados. Asimismo, solicitamos que continúe el trámite con normalidad y proceda con la publicación de la solicitud.



MADRID – BOGOTÁ – MEDELLÍN – SAN FRANCISCO – BRUSELAS – GUANGZHOU
BARCELONA – ALICANTE – SEVILLA – VALENCIA – VIGO – VITORIA – ZARAGOZA

Para efectos de notificaciones, recibiré estas vía internet (claudia.caro@ponsip.com), en la secretaría de esa dirección y/o en la de la Delegatura de Propiedad Intelectual o en mi oficina de abogados de la Calle 94 A No 11A-32 Oficina 306 de la ciudad de Bogotá.

Agradezco su atención.

CLAUDIA LUCIA CARO RAMIREZ
CC No 40.017.374 de Tunja
T.P. No 36.448 del C.S de la J.
Adjunto lo anunciado.

Anexo A

NB2-A29D6 Parabacteroides merdae

ACGAAGAGTTTGTATCCTGGCTCAGGATGAACGCTAGCGACAGGCTTAACACATGCA
AGTCGAGGGGCAGCATGATTTGTAGCAATACAGATTGATGGCGACCGGCGCACGGG
TGAGTAACGCGTATGCAACTTACCTATCAGAGGGGGATAGCCCGGCGAAAGTCGGA
TTAATACCCCATAAAACAGGGGTCCCGCATGGGAATATTTGTAAAGATTCATCGCT
GATAGATAGGCATGCGTTCCATTAGGCAGTTGGCGGGGTAACGGCCCACCAAACCG
ACGATGGATAGGGGTTCTGAGAGGAAGGTCCCCACATTGGTACTGAGACACGGAC
CAAACCTCTACGGGAGGCAGCAGTGAGGAATATTGGTCAATGGCCGAGAGGCTGAA
CCAGCCAAGTCGCGTGAAGGAAGAAGGATCTATGGTTTGTAACTTCTTTTATAGGG
GAATAAAGTGAGGACGTGTCCTTTTTTGTATGTACCCTATGAATAAGCATCGGCTA
ACTCCGTGCCAGCAGCCGCGGTAATACGGAGGATGCGAGCGTTATCCGGATTTATTG
GGTTTAAAGGGTGCGTAGGTGGTGATTTAAGTCAGCGGTGAAAGTTTGTGGCTCAAC
CATAAAATTGCCGTTGAAACTGGGTTACTTGAGTGTGTTTGAGGTAGGCGGAATGCG
TGGTGTAGCGGTGAAATGCATAGATATCACGCAGAACTCCGATTGCGAAGGCAGCT
TACTAAACCATAACTGACACTGAAGCACGAAAGCGTGGGGATCAAACAGGATTAGA
TACCCTGGTAGTCCACGCAGTAAACGATGATTACTAGGAGTTTGCGATACAATGTAA
GCTCTACAGCGAAAGCGTTAAGTAATCCACCTGGGGAGTACGCCGGAACGGTGAA
ACTCAAAGGAATTGACGGGGGGCCCGCACAAAGCGGAGGAACATGTGGTTTAATTGCA
TGATACGCGAGGAACCTTACCCGGGTTTGAACGTAGTCTGACCGGAGTGGAACAC
TCCTTCTAGCAATAGCAGATTACGAGGTGCTGTCATGGTTGTCGTCAGCTCGTGCCGT
GAGGTGTCGGCTTAAGTGCCATAACGAGCGCAACCCTTATCACTAGTTACTAACAGG
TGAAGCTGAGGACTCTGGTGAGACTGCCAGCGTAAGCTGTGAGGAAGGTGGGGATG
ACGTCAAATCAGCACGGCCCTTACATCCGGGGCGACACACGTGTTACAATGGCATG
GACAAAGGGCAGCTACCTGGCGACAGGATGCTAATCTCCAAACCATGTCTCAGTTC
GGATCGGAGTCTGCAACTCGACTCCGTGAAGCTGGATTCGCTAGTAATCGCGCATCA
GCCATGGCGCGGTGAATACGTTCCCGGGCCTTGTACACACCGCCCGTCAAGCCATGG
GAGCCGGGGGTACCTGAAGTCCGTAACCGCAAGGATCGGCCTAGGGTAAAAGTGGT
GACTGGGGCTAAGTCGTAACAAGGTAGCCGTACCGGAAGGTGCGGCTGGAACACCT
CCTTT (SEQ ID NO: 1)

NB2-B13BHI [Eubacterium] hallii

CTGAGTGGCGGACGGGTGAGTAACGCGTGGGTAACCTGCCCTGTACAGGGGGATAA
CAGCTGGAAACGGCTGCTAATACCGCATAAGCGCACGAGGAGACATCTCCTTGTGT
GAAAAACTCCGGTGGTACAGGATGGGCCCCGCGTCTGATTAGCTGGTTGGCAGGGTA
ACGGCCTACCAAGGCAACGATCAGTAGCCGGTCTGAGAGGATGAACGGCCACATTG
GAACTGAGACACGGTCCAAACTCCTACGGGAGGCAGCAGTGGGGAATATTGCACAA
TGGGGGAACCTGATGCAGCAACGCCGCGTGAGTGAAGAAGTATTTCCGGTATGTA
AAGCTCTATCAGCAGGGAAGATAATGACGGTACCTGACTAAGAAGCTCCGGCTAAA
TACGTGCCAGCAGCCGCGGTAATACGTATGGAGCAAGCGTTATCCGGATTTACTGGG
TGTAAGGGTGCGTAGGTGGCAGTGCAAGTCAGATGTGAAAGGCCGGGGCTCAACC
CCGGAGCTGCATTTGAAACTGCTCGGCTAGAGTACAGGAGAGGCAGGCGGAATTCC
TAGTGTAGCGGTGAAATGCGTAGATATTAGGAGGAACACCAGTGGCGAAGGCGGCC
TGCTGGACTGTTACTGACACTGAGGCACGAAAGCGTGGGGAGCAAACAGGATTAGA
TACCCTGGTAGTCCACGCCGTAAACGATGAATACTAGGTGTCGGGGCCGTATAGGCT
TCGGTGCCGCCGCTAACGCAGTAAGTATTCCACCTGGGGAGTACGTTGCAAGAATG

Anexo A

AAACTCAAAGGAATTGACGGGGACCCGACACAAGCGGTGGAGCATGTGGTTTAATTC
GAAGCAACGCGAAGAACCTTACCAGGTCTTGACATCCTTCTGACCGCACCTTAATCG
GTGCTTTCCTTCGGGACAGAAGAGACAGGTGGTGCATGGTTGTCGTCAGCTCGTGTC
GTGAGATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCCTATCTTCAGTAGCCAGCA
GGTAAGGCTGGGCACTCTGGAGAGACTGCCAGGGATAACCTGGAGGAAGGTGGGG
ACGACGTCAAATCATCATGCCCCTTATGATCTGGGCGACACACGTGCTACAATGGCG
GTCACAGAGTGAGGCGAACCCGCGAGGGGGAGCAAACCACAAAAAGGCCGTCCCA
GTTCCGACTGTAGTCTGCAACCCGACTACACGAAGCTGGAATCGCTAGTAATCGCGA
ATCAGAATGTCGCGGTGAATACGTTCCCGGGTCTTGTACACACCGCCCGTCACACCA
TGGGAGTCGGAAATGCCCCGAAGCCAGTGACCCAACCTTTTGGAGGGAGCTGTCGAA
GGTGGAGCCGGTAACTGGGGTGAAGTCGTAACAAGGTAGCCGTATCGGAAGGTGCG
GCTGGATCACCTCCTTT (SEQ ID NO: 2)

NB2-A10MRS *Parabacteroides distasonis*

CTATCAGAGGGGGATAACCCGGCGAAAGTCGGACTAATAACCGCATGAAGCAGGGGC
CCCGCATGGGGATATTTGCTAAAGATTCATCGCTGATAGATAGGCATGCGTTCCATT
AGGCAGTTGGCGGGGTAACGGCCACCAAACCGACGATGGATAGGGGTTCTGAGAG
GAAGGTCCCCCACATTGGTACTGAGACACGGACCAAACCTCCTACGGGAGGCAGCAG
TGAGGAATATTGGTCAATGGGCGTAAGCCTGAACCAGCCAAGTCGCGTGAGGGATG
AAGGTTCTATGGATCGTAAACCTCTTTTATAAGGGAATAAAGTGCGGGACGTGTCCT
GTTTTGTATGTACCTTATGAATAAGGATCGGCTAACTCCGTGCCAGCAGCCGCGGTA
ATACGGAGGATCCGAGCGTTATCCGGATTTATTGGGTTTAAAGGGTGCGTAGGCGGC
CTTTTAAGTCAGCGGTGAAAGTCTGTGGCTCAACCATAGAATTGCCGTTGAAACTGG
GGGGCTTGAGTATGTTTGAGGCAGGCGGAATGCGTGGTGTAGCGGTGAAATGCTTA
GATATCACGCAGAACCCCGATTGCGAAGGCAGCCTGCCAAGCCATGACTGACGCTG
ATGCACGAAAGCGTGGGGATCAAACAGGATTAGATAACCCTGGTAGTCCACGCAGTA
AACGATGATCACTAGCTGTTTTCGATACAGTGTAAGCGGCACAGCGAAAGCGTTAA
GTGATCCACCTGGGGAGTACGCCGGCAACGGTGAAACTCAAAGGAATTGACGGGGG
CCCGCACAAAGCGGAGGAACATGTGGTTTAAATTCGATGATACGCGAGGAACCTTACC
CGGGTTTGAACGCATTCCGACCGAGGTGGAAACACCTTTTCTAGCAATAGCCGTTTG
CGAGGTGCTGCATGGTTGTCGTCAGCTCGTGCCGTGAGGTGTCGGCTTAAGTGCCAT
AACGAGCGCAACCCTTGCCACTAGTTACTAACAGGTGATGCTGAGGACTCTGGTGG
GACTGCCAGCGTAAGCTGCGAGGAAGGCGGGGATGACGTCAAATCAGCACGGCCCT
TACATCCGGGGCGACACACGTGTTACAATGGCGTGGACAAAGGGATGCCACCTGGC
GACAGGGAGCGAATCCCCAAACCACGTCTCAGTTCGGATCGGAGTCTGCAACCCGA
CTCCGTGAAGCTGGATTTCGCTAGTAATCGCGCATCAGCCATGGCGCGGTGAATACGT
TCCCGGGCCTTGTACACACCGCCCGTCAAGCCATGGGAGCCGGGGGTACCTGAAGT
CCGTA (SEQ ID NO: 3)

NB2-A12FMU *Phascolarctobacterium succinatutens*

ATTGGAGAGTTTGATCCTGGCTCAGGACGAACGCTGGCGGCATGCCTAACACATGC
AAGTCGAACGGAGAAAGTTCAACACCAAGTATTTTCATCCGCTGAAGTGTAGCGGTA
AAAATTGCGAAGCAATTTTTACTACGCATTAAAAGCATGAACTAACACGGTGGTTGA
AGTATTAGGTGTTGAACTTTCTTAGTGGCGAACGGGTGAGTAACGCGTGGGCAACCT
GCCCTCTAGATGGGGACAACATCCCGAAAGGGGTGCTAATACCGAATGTGACAGCA

Anexo A

ATCTCGCATGAGGATGCTGTGAAAGATGGCCTCTATTTATAAGCTATCGCTAGAGGA
TGGGCCTGCGTCTGATTAGCTAGTTGGTGGGGTAACGGCCTACCAAGGCGATGATCA
GTAGCCGGTCTGAGAGGATGAACGGCCACATTGGGACTGAGACACGGCCCAGACTC
CTACGGGAGGCAGCAGTGGGGAATCTTCCGCAATGGGCGAAAGCCTGACGGAGCAA
TGCCGCGTGAGTGATGAAGGAATTCGTTCCGTAAAGCTCTTTTGTATTGACGAATG
TGCAGATTGTAAATAATGATCTGTAATGACGGTAGTAAACGAATAAGCCACGGCTA
ACTACGTGCCAGCAGCCGCGGTAATACGTAGGTGGCGAGCGTTGTCCGGAATTATTG
GGCGTAAAGAGCATGTAGGCGGTTTTTTAAGTCTGGAGTGAAAATGCGGGGCTCAA
CCCCGTATGGCTCTGGATACTGGAAGACTTGAGTGCAGGAGAGGAAAGGGGAATTC
CCAGTGTAGCGGTGAAATGCGTAGATATTGGGAGGAACACCAGTGGCGAAGGCGCC
TTTCTGGACTGTGTCTGACGCTGAGATGCGAAAGCCAGGGTAGCGAACGGGATTAG
ATACCCCGGTAGTCCTGGCCGTAAACGATGGGTACTAGGTGTAGGAGGTATCGACC
CCTTCTGTGCCGGAGTTAACGCAATAAGTACCCCGCCTGGGGAGTACGTCCGCAAG
GATGAAACTCAAAGGAATTGACGGGGGCCCCGCACAAGCGGTGGAGTATGTGGTTTA
ATTCGACGCAACGCGAAGAACCTTACCAAGGCTTGACATTGAATGACCGCTCCAGA
GATGGAGCTTTCCCTTCGGGGACATGAAAACAGGTGGTGCATGGCTGTCGTCAGCTC
GTGTCGTGAGATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCCTATCCTATGTTAC
CAGCGGGTAATGCCGGGGACTCATAGGAGACTGCCAAGGACAACCTTGGAGGAAGGC
GGGGATGACGTCAAGTCATCATGCCCCTTATGTCTTGGGCTACACACGTACTACAAT
GGTCGGCAACAGAGGGAAGCAAAGCCGTGAGGCAGAGCAAACCCCGAGAAACCCGA
TCCAGTTTCGATTGCAGGCTGCAACTCGCCTGCATGAAGTCGGAATCGCTAGTAAT
CGCAGGTCAGCATACTGCGGTGAATACGTTCCCGGGCCTTGTACACACCGCCCGTCA
CACCACGAAAGTTGGTAACACCCGAAGCCGGTGGGGTAACCGTAAGGAGCCAGCCG
TCTAAGGTGGGGCCGATGATTGGGGTGAAGTCGTAACAAGGTAGCCGTATCGGAAG
GTGCGGCTGGATCACCTCCTTT (SEQ ID NO: 4)

NB2-B17NB *Ruminococcus lactaris*

GAGAGTTTGATCCTGGCTCAGGATGAACGCTGGCGGCGTGCTTAACACATGCAAGTC
GAGCGAAGCACTTAGGAAAGATTCTTCGGATGATTTCTATTGACTGAGCGGCGGA
CGGGTGAGTAACGCGTGGGTAACTGCCTCATAACAGGGGGATAACAGTTAGAAATG
ACTGCTAATACCGCATAAGACCACAGCACCGCATGGTGCAGGGGTAAAACTCCGG
TGGTATGAGATGGACCCGCGTCTGATTAGTTAGTTGGTGGGGTAACGGCCTACCAAG
GCGACGATCAGTAGCCGACCTGAGAGGGTGACCGGCCACATTGGGACTGAGACACG
GCCCCAACTCCTACGGGAGGCAGCAGTGGGGAATATTGCACAATGGGGGAAACCCT
GATGCAGCGACGCCGCGTGAGCGAAGAAGTATTTCCGTATGTAAAGCTCTATCAGC
AGGGAAGAAAATGACGGTACCTGACTAAGAAGCCCCGGCTAACTACGTGCCAGCAG
CCGCGGTAATACGTAGGGGGCAAGCGTTATCCGGATTTACTGGGTGTAAAGGGAGC
GTAGACGGAGCAGCAAGTCTGATGTGAAAACCCGGGGCTCAACCCCGGGACTGCAT
TGGAAACTGTTGATCTGGAGTGCCGGAGAGGTAAGCGGAATTCCTAGTGTAGCGGT
GAAATGCGTAGATATTAGGAGGAACACCAGTGGCGAAGGCGGCTTACTGGACGGTA
ACTGACGTTGAGGCTCGAAAGCGTGGGGAGCAAACAGGATTAGATACCCTGGTAGT
CCACGCCGTAAACGATGACTACTAGGTGTCGGGTGGCAAAGCCATTCCGGTGCCGCA
GCCAACGCAATAAGTAGTCCACCTGGGGAGTACGTTTCGCAAGAATGAAACTCAAAG
GAATTGACGGGGACCCGCACAAGCGGTGGAGCATGTGGTTTAATTCGAAGCAACGC
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Anexo A

GGGTAAAGTCCCGCAACGAGCGCAACCCCTATCTTCAGTAGCCAGCGGTAAGGCCG
GGCACTCTGGAGAGACTGCCAGGGATAACCTGGAGGAAGGTGGGGATGACGTCAA
TCATCATGCCCCCTTATGAGCAGGGCTACACACGTGCTACAATGGCGTAAACAAAGG
GAAGCGAACCCGCGAGGGTGGGCAAATCCCAAAAATAACGTCTCAGTTCGGATTGT
AGTCTGCAACTCGACTACATGAAGCTGGAATCGCTAGTAATCGCGAATCAGAATGTC
GCGGTGAATACGTTCCCGGGTCTTGTACACACCGCCCGTCACACCATGGGAGTCAGT
AACGCCCCGAAGTCAGTGACCCAACC (SEQ ID NO: 5)

NB2-B16D5 *Neglecta timonensis*

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TATCTTAGTGGCGGACGGGTGAGTAACGCGTGAGTAACCTGCCTTTCAGAGGGGGA
TAACGTCTGGAACGGACGCTAATACCGCATGAGACCACAGCTTCACATGGAGCGG
CGGTCAAAGGAGCAATCCGCTGAAAGATGGACTCGCGTCCGATTAGATAGTTGGCG
GGGTAACGGCCCACCAAGTCGACGATCGGTAGCCGGACTGAGAGGTTGAACGGCCA
CATTGGGACTGAGACACGGCCCAGACTCCTACGGGAGGCAGCAGTGAGGGATATTG
GTCAATGGGGGAAACCCTGAACCAGCAACGCCGCGTGAGGGAAGACGGTTTTTCGGA
TTGTAAACCTCTGTCTCTGTGAAGATAGTGACGGTAGCAGAGGAGGAAGCTCCGG
CTAACTACGTGCCAGCAGCCGCGGTAATACGTAGGGAGCGAGCGTTGTCCGGATTT
ACTGGGTGTAAAGGGTGCGTAGGCGGCTCTGCAAGTCAGAAGTGAAATCCATGGGC
TTAACCCATGAACTGCTTTTGAAACTGTAGAGCTTGAGTGAAGTAGAGGTAGGCGG
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GCGGCCTACTGGGCTTTAACTGACGCTGAGGCACGAAAGCATGGGTAGCAAACAGG
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ACCCCCTCCGTGCCGGAGTTAACACAATAAGTAATCCACCTGGGGAGTACGACCGC
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TTAATTCGAAGCAACGCGAAGAACCTTACCAGGTCTTGACATCCAACCTAACGAAGC
AGAGATGCATTAGGTGCCCTTCGGGGAAAGTTGAGACAGGTGGTGCATGGTTGTCTG
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TAGTTGCTACGCAAGAGCACTCTAGCAGGACTGCCGTTGACAAAACGGAGGAAGGT
GGGACGACGTCAAATCATCATGCCCCTTATGACCTGGGCCTCACACGTACTACAAT
GGCCATTAACAGAGGGAAGCAAGCCCGCGAGGTGGAGCAAAACCCTAAAAATGGT
CTCAGTTCGGATCGTAGGCTGAAACCCGCCTGCGTGAAGTTGGAATTGCTAGTAATC
GCGGATCAGCATGCCGCGGTGAATACGTTCCCGGGCCTTGTACACACCGCCCGTCAC
ACCATGGGAGCCGTAATACCCGAAGTCAGTAGTCTAACCGCAAGGGGGACGCTGC
CGAAGGTAGGATTGGCGACTGGGGTGAAGTCGTAACAAGGTAGCCGTATCGGAAGG
TGCGGCTGGATCACCTCCTTT (SEQ ID NO: 6)

NB2-B10NB [*Clostridium*] *spiroforme*

ATGGAGAGTTTGATCCTGGCTCAGGATGAACGCTGGCGGCGTGCCTAATACATGCA
AGTCGAACGCTTCACTTCGGTGAAGAGTGCGGAACGGGTGAGTAATACATAAGTAA
CCTGGCATCTACAGGGGGGATAACTGATGGAAACGTCAGCTAAGACCGCATAGGTGT
AGAGATCGCATGAACTCTATATGAAAAGTGCTACGGGACTGGTAGATGATGGACTT
ATGGCGCATTAGCTGGTTGGTAGGGTAACGGCCTACCAAGGCGACGATGCGTAGCC
GACCTGAGAGGGTGACCGGCCACACTGGGACTGAGACACGGCCCAGACTCCTACGG

Anexo A

GAGGCAGCAGTAGGGAATTTTCGGCAATGGGGGAAACCCTGACCGAGCAACGCCGC
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TATAGGGAATGATATCCAAGTGACGGTACTCTATAAGAAAGCCACGGCTAACTACG
TGCCAGCAGCCGCGGTAATACGTAGGTGGCGAGCGTTATCCGGAATTATTGGGCGT
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CGCGAAGAACCCTTACCAGGTCTTGACATCGATCTAAAGGCTCCAGAGATGGAGAGA
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GACTCTGGCGAGACTGCCGGTGACAAGCCGGAGGAAGGCGGGGATGACGTCAAATC
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AGCGAAGCCGCGAGGTGGAGCGAAACCCATAAACTGTTCTCAGTTCGGACTGCAG
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GGTGAATACGTTCTCGGGCCTTGTACACACCGCCCCGTACACCATGAGAGTCGGTAA
CACCCGAAGCCGGTGGCCTAACCGCAAGGAAGGAGCTGTCTAAGGTGGGACTGATG
ATTGGGGTGAAGTCGTAACAAGGTATCCCTACGGGAACGTGGGGATGGATCACCTC
CTTT (SEQ ID NO: 7)

NB2-B10FAA *Roseburia intestinalis*

ACTGAGTGGCGGACGGGTGAGTAACGCGTGGGTAACTGCCTCATACAGGGGGATA
ACAGTTGGAAACGACTGCTAATACCGCATAAGCGCACAGGGTCGCATGACCTGGTG
TGAAAAACTCCGGTGGTATGAGATGGACCCGCGTCTGATTAGCCAGTTGGTGGGGT
AACGGCCTACCAAAGCGACGATCAGTAGCCGACCTGAGAGGGTGACCGGCCACATT
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ATGGGGGAAACCCTGATGCAGCGACGCCGCGTGAGCGAAGAAGTATTTTCGGTATGT
AAAGCTCTATCAGCAGGGAAGAAGAAATGACGGTACCTGACTAAGAAGCACCGGCT
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ACCCCGGTACTGCATTGGAACTGTCGGACTAGAGTGTCTGGAGGGGTAAGTGGAAAT
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GCTTACTGGACGATTACTGACGCTGAGGCTCGAAAGCGTGGGGAGCAAACAGGATT
AGATACCCTGGTAGTCCACGCCGTAAACGATGAATACTAGGTGTCTGGGGAGCATTG
CTCTTCGGTGCCGCAGCAAACGCAATAAGTATTCCACCTGGGGAGTACGTTTCGCAAG
AATGAAACTCAAAGGAATTGACGGGGACCCGCACAAGCGGTGGAGCATGTGGTTTA
ATTCGAAGCAACGCGAAGAACCTTACCAAGTCTTGACATCCCGATGACAGAACATG
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GTGTCTGTGAGATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCCTATTCTTAGTAGC
CAGCGGGTAAGCCGGGCACTCTAGGGAGACTGCCAGGGATAACCTGGAGGAAGGTG
GGGATGACGTCAAATCATCATGCCCCCTTATGACTTGGGCTACACACGTGCTACAATG
GCGTAAACAAAGGGAAGCGAGCCTGCGAGGGGGAGCAAATCTCAAAAATAACGTC
TCAGTTCGGACTGCAGTCTGCAACTCGACTGCACGAAGCTGGAATCGCTAGTAATCG

Anexo A

CGAATCAGAATGTCGCGGTGAATACGTTCCCGGGTCTTGTACACACCGCCCGTCACA
CCATGGGAGTTGGTAATGCCCCGAAGTCAGTGACCCAACCGCAAGGAGGGAGCTGCC
GAAGGCAGGATCGATAACTGGGGTGAAGTCGTAACAAGGTAGCCGTATCGGAAGGT
GCGGCTGGATCACCTCCTTT (SEQ ID NO: 8)

NB2-A8WC *Akkermansia muciniphila*

ATGGAGAGTTTGATTCTGGCTCAGAACGAACGCTGGCGGCGTGGATAAGACATGCA
AGTCGAACGAGAGAATTGCTAGCTTGCTAATAATTCTCTAGTGGCGCACGGGTGAGT
AACACGTGAGTAACCTGCCCCGAGAGCGGGATAGCCCTGGGAAACTGGGATTAAT
ACCGCATAGAATCGCAAGATTAAAGCAGCAATGCGCTTGGGGATGGGCTCGCGGCC
TATTAGTTAGTTGGTGAGGTAACGGCTCACCAAGGCGATGACGGGTAGCCGGTCTG
AGAGGATGTCCGGCCCACTGGAAGTGAAGACACGGTCCAGACACCTACGGGTGGCA
GCAGTCGAGAATCATTCACAATGGGGGAAACCCTGATGGTGCGACGCCGCGTGGGG
GAATGAAGGTCTTCGGATTGTAAACCCCTGTCATGTGGGAGCAAATTA AAAAGATA
GTACCACAAGAGGAAGAGACGGCTAACTCTGTGCCAGCAGCCGCGGTAATACAGAG
GTCTCAAGCGTTGTTTCGGAATCACTGGGCGTAAAGCGTGCGTAGGCTGTTTCGTAAG
TCGTGTGTGAAAGGCGCGGGCTCAACCCGCGGACGGCACATGATACTGCGAGACTA
GAGTAATGGAGGGGGAACCGGAATTCTCGGTGTAGCAGTGAAATGCGTAGATATCG
AGAGGAACACTCGTGGCGAAGGCGGGTTCCTGGACATTAAGTACGCTGAGGCACG
AAGGCCAGGGGAGCGAAAGGGATTAGATAACCCCTGTAGTCCTGGCAGTAAACGGTG
CACGCTTGGTGTGCGGGGAATCGACCCCTGCGTGCCGGAGCTAACGCGTTAAGCG
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GCACAAGCGGTGGAGTATGTGGCTTAATTCGATGCAACGCGAAGAACCTTACCTGG
GCTTGACATGTAATGAACAACATGTGAAAGCATGCGACTCTTCGGAGGCGTTACAC
AGGTGCTGCATGGCCGTCGTCAGCTCGTGTGTCGTGAGATGTTTGGTTAAGTCCAGCAA
CGAGCGCAACCCCTGTTGCCAGTTACCAGCACGTGAAGGTGGGGACTCTGGCGAGA
CTGCCCAGATCAACTGGGAGGAAGGTGGGGACGACGTCAGGTCAGTATGGCCCTTA
TGCCCAGGGCTGCACACGTACTACAATGCCCAGTACAGAGGGGGCCGAAGCCGCGA
GGCGGAGGAAATCCTAAAACTGGGCCCAGTTCGGACTGTAGGCTGCAACCCGCCT
ACACGAAGCCGGAATCGCTAGTAATGGCGCATCAGCTACGGCGCCCGTGAATACGTT
CCCGGGTCTTGTACACACCGCCCGTCACATCATGGAAGCCGGTCGCACCCGAAGTAT
CTGAAGCCAACCGCAAGGAGGCAGGGTCTAAGGTGAGACTGGTAAGTGGGATGAA
GTCGTAACAAGGTAGCCGTAGGGGAACCTGCGGCTGGATCACCTCCTTT (SEQ ID
NO: 9)

NB2-A9NA [*Ruminococcus*] *obeum*

GCTTAACACATGCAAGTCGAACGAGAAGGCGTAGCAATACGCTTGTAAGTGGCGA
ACGGGTGAGNAACACNTGGGTAACTACCCTCGAGTGGGGGATAACCCGCCGAAAG
GCGGGCTAATACCGCGTACGCTTCGATCTTGCGAGATCGGAAGGAAAGCTGTCCC
AAGGGGATGGCGCTCAAGGATGGGCTCACGTCCNATCAGCTNGTTGGTGNGGTAAC
GGCNNACCAAGGCGACGANGGNTAGCTGGTCTGAGAGGANGANCAGCCACACTGG
GACTGNGACACGGCCCAGACTCCTACGGGAGGCAGCAGTNGGGAATCTTGCGCAAT
GNGCGAAAGCNTGACGCAGCNACGCCGCGTGNGGGANGANGGCCNTCGGGTTGTA
AACCNCTTTCAGNAGGGACGAATCTGACGGTACCTGCAGAAGAAGCCCCGGCNAAC
TACGTGCCAGCAGCCGCGGTAATACGTAGGGGGCNAGCGTTGTCCGATTTATTGG

Anexo A

GCGTAAAGAGCTCGTAGGGCGGCTTGGCAAGTCGGGTGTGAAACCTCCAGGCTTAAC
CTGGAGACGCCACTCGATNCTGCCATGGCTAGAGTCCGGTAGGGGACCACGGAATT
CCTGGTGTAGCGGTGAAATGCGCAGATATCAGGAGGAACNCCGGTGGCGAAGGCGG
NGNTCTGGGNCGGNACTGACGCTGAGGNGCGAAAGCGTGGGNAGCAAACAGGATT
AGATAACCCTGGTAGTCCACGCCGTAAACGNTGGGCACTAGGTGTGGGACCTTATCA
ACGGGTTCCGTGCCGTAGCTAACGCATTAAGTGCCCCGCCTGGGGAGTACGGCCGC
AAGGCTAAAACTCAAAGGAATTGACGGGGGGCCCGCACAAAGCGGCGGAGCATGTTGC
TTAATTCGATGCAACGCGAAGAACCTTACCTGGGTGAACTACGCGGGAAAAGCCA
CAGAGATGTGGTGTCCGAAAGGGCCCCGCGATAGGTGGTGCATGGCTGTCGTCAGCT
CGTGTCGTGAGATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCTTNTCCNATGTTG
CCAGCGGATCATGCCGGGGACTCNTGGGAGACTGCCGGGGTCAACTCGGAGGAAGG
TGGGGATGACGTCAAGTCANCATGCCCTTATGTCCAGGGCTNNAAACATGCTACA
ATGGCCCGGTACAAAGGGTNGCGAGNCNGCGANGNNGAGCNAATCCCATAAAGNNN
GTCTNAGTNCGGATCGNAGTCTGCAACTCGACTNCGTGAAGNCGGAGTNGCTAGTA
ATCNCGNATCAGCANNGNCGNGGTGAATACGTTCCCGGGCCTTGTACACACCGCCC
GTCACACCACGAAAGTTGGTAACACCCGAAGCCGGTGG (SEQ ID NO: 10)

NB2-B20GAM [*Clostridium*] lactatifermentans

GAGTAATTCGGTATAGGATGGGCCCCGCATCTGATTAGCTAGTTGGTGAGATAACAGC
CCACCAAGGCGACGATCAGTAGCCGACCTGAGAGGGTGATCGGCCACATTGGGACT
GAGACACGGCCCCAACTCCTACGGGAGGCAGCAGTGGGGAATATTGCACAATGGGG
GAAACCCTGATGCAGCAACGCCGCGTGAAGGAAGAAGGTTTTTCGGATCGTAAACTT
CTATCAACAGGGACGAAGAAAGTGACGGTACCTGAATAAGAAGCCCCGGCTAACTA
CGTGCCAGCAGCCGCGGTAATACGTAGGGGGCAAGCGTTATCCGGAATTACTGGGT
GTAAAGGGAGCGTAGGCGGCACGCCAAGCCAGATGTGAAAGCCCCGAGGCTTAACCT
CGCGGATTGCATTTGGAAGTGGCGAGCTAGAGTACAGGAGAGGAAAGCGGAATTCC
TAGTGTAGCGGTGAAATGCGTAGATATTAGGAAGAACACCAGTGGCGAAGGCGGCT
TTCTGGACTGAACTGACGCTGAGGCTCGAAAGCGTGGGGAGCAAACAGGATTAGA
TACCCTGGTAGTCCACGCCGTAAACGATGAGTGCTAGGTGTCGGGGAGGAATCCTC
GGTGCCGCAGCTAACGCAATAAGCACTCCACCTGGGGAGTACGACCGCAAGGTTGA
AACTCAAAGGAATTGACGGGGGGCCCGCACAAAGCGGTGGAGCATGTGGTTTAATTCG
AAGCAACGCGAAGAACCTTACCAAGGCTTGACATCCCGATGACCGCTCTAGAGATA
GAGNTTCTCTTCGGAGCATCGGTGACAGGTGGTGCATGGTTGTCGTCAGCTCGTGTC
GTGAGATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCTTATCCTTAGTAGCCATCA
TTGAGTTGGGCACTCTAGGGAGACTGCCGTGGATAACACGGAGGAAGGTGGGGATG
ACGTCAAATCATCATGCCCTTATGTCTTGGGCTACACACGTGCTACAATGGCTGGT
AACAGAGTGAAGCGAGACGGCGACGTTAAGCAAATCACAAAACCCAGTCCCAGTT
CGGATTGTAGTCTGCAACTCGACTACATGAAGCTGGAATCGCTAGTAATCGCGAATC
AGAATGTCGCGGTGAATACGTTCCCGGGCCTTGTACACACCGCCCCGTCACACCATGG
GAGTTGGAAGCACCCGAAGTCGGTGACCTAACCGTAAGGAAGGAGCCGCCGAAGGT
GAAGCCAGTGACTGGGGTGAAGTCGTAACAAGGTAGCCGTATCGGAAGGTGCGGCT
GGATCACCTCCTTT (SEQ ID NO: 11)

NB2-A15BHI *Anaerovorax odorimutans*

Anexo A

ATATGAGAGTTTGTATCCTGGCTCAGGATGAACGCTGGCGGCGTGCCTAACACATGCA
AGTCGAGCGAGAAGCTGATGATTGACACTTCGGTTGAGAGAATCAGTGGAAAGCGG
CGGACGGGTGAGTAACGCGTAGGCAACCTGCCCTTTGCAGAGGGATAGCCTCGGGA
AACCGGGATTAAAACCTCATGATGCTGTATGTCCGCATGGGCAGACGGTCAAAGAT
TTATCGGCAGAGGATGGGCCTGCGTCTGATTAGTTAGTTGGTGGGGTAACGGCCTAC
CAAGGCAACGATCAGTAGCCGACCTGAGAGGGTGATCGGCCACATTGGAAGTGAAGA
CACGGTCCAACTCCTACGGGAGGCAGCAGTGGGGAATATTGCACAATGGGGGAAA
CCCTGATGCAGCAACGCCGCGTGAGCGAAGAAGGCCTTTGGGTTCGTAAAGCTCTGT
CCTTGGGGAAGAAAAAATGACGGTACCCAAGGAGGAAGCCCCGGCTAACTACGTGC
CAGCAGCCGCGGTAATACGTAGGGGGCAAGCGTTATCCGGAATTATTGGGCGTAAA
GAGTATGTAGGTGGTTTCTTAAGCGCAGGGTATAAGGCAATGGCTTAACCATTGTTC
GCCCCGTGAAGTGAAGACTTGAGTGCTGGAGAGGAAAGCGGAATTCCTAGTGTAG
CGGTGAAATGCGTAGATATTAGGAGGAACACCAGTGGCGAAGGCGGCTTTCTGGAC
AGTAACTGACACTGAGATACGAAAGCGTGGGGAGCAAACAGGATTAGATACCCTGG
TAGTCCACGCCGTAAACGATGAGCACTAGGTGTCGGGCTCGCAAGAGTTCGGTGCC
GGAGTTAACGCATTAAGTGCTCCGCCTGGGGAGTACGCACGCAAGTGTAAGAACTCA
AAGGAATTGACGGGGACCCGCACAAGCAGCGGAGCATGTGGTTTAATTCGAAGCAA
CGCGAAGAACCTTACCAGGGCTTGACATCCCTCCGACCGGTCCCTAATCGGACCTTT
CTACGGACGGGGGAGACAGGTGGTGCATGGTTGTCGTCAGCTCGTGTCTGTGAGATG
TTGGGTTAAGTCCCGCAACGAGCGCAACCCTTGTCAATTAGTTGCTAACAGTAAGATG
AGAACTCTAATGAGACTGCCGTGGATAACACGGAGGAAGGTGGGGATGACGTCAAA
TCATCATGCCCCCTTATGTCCTGGGCTACACACGTGCTACAATGGTTCGGTACAAAGAG
AAGCAAGACCGCGAGGTGGAGCAAATCTCAAAAACCGATCCCAGTTCGGATTGCAG
GCTGCAACTCGCCTGCATGAAGTCGGAGTTGCTAGTAATCGCAGATCAGAATGCTGC
GGTGAATGCGTTCCCGGGTCTTGTACACACCGCCCCGTCACACCATGGAAGTTGGGGG
CGCCCGAAGTCGGCTAGTAAATAGGCTGCCTAAGGCGAAATCAATGACTGGGGTGA
AGTCGTAACAAGGTAGCCGTATCGGAAGGTGCGGCTGGATCACCTCCTTT (SEQ ID
NO: 12)

NB2-A14FMU [Ruminococcus] torques

AACGAGAGTTTGTATCCTGGCTCAGGATGAACGCTGGCGGCGTGCCTAACACATGCA
AGTCGAGCGAAGCACTTTGCTTAGATTCTTCGGATGAAGAGGATTGTGACTGAGCGG
CGGACGGGTGAGTAACGCGTGGGTAACCTGCCTCATACAGGGGGGATAACAGTTAGA
AATGACTGCTAATACCGCATAAGACCACAGCACCGCATGGTGCGGGGGTAAAACT
CCGGTGGTATGAGATGGACCCGCGTCTGATTAGCTAGTTGGTAAGGTAACGGCTTAC
CAAGGCGACGATCAGTAGCCGACCTGAGAGGGTGACCGGCCACATTGGGACTGAGA
CACGGCCCCAACTCCTACGGGAGGCAGCAGTGGGGAATATTGCACAATGGGGGAAA
CCCTGATGCAGCGACGCCGCGTGAGCGAAGAAGTATTTCCGTATGTAAAGCTCTATC
AGCAGGGAAGAAAAATGACGGTACCTGACTAAGAAGCACCGGCTAAATACGTGCCAG
CAGCCGCGGTAATACGTATGGTGCAAGCGTTATCCGGATTTACTGGGTGTAAAGGG
AGCGTAGACGGATGGGCAAGTCTGATGTGAAAACCCGGGGCTCAACCCCGGGACTG
CATTGGAACTGTTTCATCTAGAGTGCTGGAGAGGTAAGTGGAATTCCTAGTGTAGCG
GTGAAATGCGTAGATATTAGGAGGAACACCAGTGGCGAAGGCGGCTTACTGGACAG
TAACTGACGTTGAGGCTCGAAAGCGTGGGGAGCAAACAGGATTAGATACCCTGGTA
GTCCACGCCGTAAACGATGACTACTAGGTGTCGGGTGGCAAAGCCATTCGGTGCCG
CAGCAAACGCAATAAGTAGTCCACCTGGGGAGTACGTTTCGCAAGAATGAACTCAA

Anexo A

AGGAATTGACGGGGACCCGCACAAGCGGTGGAGCATGTGGTTTAATTTCGAAGCAAC
GCGAAGAACCTTACCTGCTCTTGACATCCCGCTGACCGGACGGTAATGCGTCCTTCC
CTTCGGGGCAGCGGAGACAGGTGGTGCATGGTTGTCGTCAGCTCGTGTCTGAGATG
TTGGGTTAAGTCCCGCAACGAGCGCAACCCCTATCTTTAGTAGCCAGCGGCCAGGCC
GGGCACTCTAGAGAGACTGCCGGGGATAACCCGGAGGAAGGTGGGGATGACGTCA
AATCATCATGCCCCCTTATGAGCAGGGCTACACACGTGCTACAATGGCGTAAACAAA
GGGAAGCGAGACCGCGAGGTGGAGCAAATCCCAAAAATAACGTCTCAGTTCGGATT
GTAGTCTGCAACTCGACTACATGAAGCTGGAATCGCTAGTAATCGCGAATCAGAAT
GTCGCGGTGAATACGTTCCCGGGTCTTGTACACACCGCCCGTCACACCATGGGAGTC
AGTAACGCCCCGAAGTCAGTGACCCAACCGTAAGGAGGGAGCTGCCGAAGGCGG
(SEQ ID NO: 13)

NB2-A17FMU [Eubacterium] rectale

ATTTTGTGACTGAGTGGCGGACGGGTGAGTAACGCGTGGGTAAACCTGCCTTGTACAG
GGGGATAACAGTTGGAAACGGCTGCTAATACCGCATAAGCGCACAGCATCGCATGA
TGCAGTGTGAAAACTCCGGTGGTATAAGATGGACCCGCGTTGGATTAGCTAGTTGG
TGAGGTAACGGCCCACCAAGGCGACGATCCATAGCCGACCTGAGAGGGTGACCGGC
CACATTGGGACTGAGACACGGCCCAAACCTCTACGGGAGGCAGCAGTGGGGAATAT
TGCACAATGGGCGAAAGCCTGATGCAGCGACGCCGCGTGAGCGAAGAAGTATTTCTG
GTATGTAAAGCTCTATCAGCAGGGAAGATAATGACGGTACCTGACTAAGAAGCACC
GGCTAAATACGTGCCAGCAGCCGCGGTAAATACGTATGGTGCAAGCGTTATCCGGATT
TACTGGGTGTAAAGGGAGCGCAGGCGGTGCGGCAAGTCTGATGTGAAAGCCCGGGG
CTCAACCCCGGTACTGCATTGGAAACTGTCGTACTAGAGTGTTCGGAGGGGTAAGCG
GAATTCCTAGTGTAGCGGTGAAATGCGTAGATATTAGGAGGAACACCAGTGGCGAA
GGCGGCTTACTGGACGATAACTGACGCTGAGGCTCGAAAGCGTGGGGAGCAAACAG
GATTAGATACCCTGGTAGTCCACGCCGTAAACGATGAATACTAGGTGTTGGGAAGC
ATTGCTTCTCGGTGCCGTCGCAAACGCAGTAAGTATTCCACCTGGGGAGTACGTTCTG
CAAGAATGAACTCAAAGGAATTGACGGGGACCCGCACAAGCGGTGGAGCATGTG
GTTTAATTCGAAGCAACGCGAAGAACCTTACCAAGTCTTGACATCCTTCTGACCGGT
ACTTAACCGTACCTTCTCTTCGGAGCAGGAGTGACAGGTGGTGCATGGTTGTCGTCA
GCTCGTGTCTGTGAGATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCTTATCTTTAG
TAGCCAGCGGTTTCGGCCGGGCACTCTAGAGAGACTGCCAGGGATAACCTGGAGGAA
GGCGGGGATGACGTCAAATCATCATGCCCCCTTATGACTTGGGCTACACACGTGCTAC
AATGGCGTAAACAAAGGGAAGCAAAGCTGTGAAGCCGAGCAAATCTCAAAAATAA
CGTCTCAGTTCGGACTGTAGTCTGCAACCCGACTACACGAAGCTGGAATCGCTAGTA
ATCGCAGATCAGAATGCTGCGGTGAATACGTTCCCGGGTCTTGTACACACCGCCCGT
CACACCATGGGAGTTGGGAATGCCCCGAAGCCAGTGACCTAACCGAAAGGAAGGAG
CTGTCTGAAGGCAGGCTCGATAACTGGGGTGAAGTCGTAACAAGGTAGCCGTATCGG
AAGGTGCGGCTGGATCACCTCCTTT (SEQ ID NO: 14)

NB2-B14D5 Bacteroides eggerthii

ATGAAGAGTTTGATCCTGGCTCAGGATGAACGCTAGCTACAGGCTTAACACATGCA
AGTCGAGGGGCAGCATGATTGAAGCTTGCTTCAATCGATGGCGACCGGCGCACGGG
TGAGTAACACGTATCCAACCTGCCGATAACTCGGGGATAGCCTTTCGAAAGAAAGA
TTAATACCCGATAGTATAGTATTTCCGCATGGTTTCACTATTAAAGAATTTTCGGTTAT

Anexo A

CGATGGGGATGCGTTCCATTAGATAGTTGGCGGGGTAACGGGCCACCAAGTCAACG
ATGGATAGGGGTTCTGAGAGGAAGGTCCCCACATTGGAAGTGAACACGGTCCAA
ACTCCTACGGGAGGCAGCAGTGAGGAATATTGGTCAATGGACGAGAGTCTGAACCA
GCCAAGTAGCGTGAAGGATGACTGCCCTATGGGTTGTAACTTCTTTTATACGGGAA
TAAAGTGGAGTATGCATACTCCTTTGTATGTACCGTATGAATAAGGATCGGCTAACT
CCGTGCCAGCAGCCGCGGTAATACGGAGGATCCGAGCGTTATCCGGATTTATTGGGT
TTAAAGGGAGCGTAGGCGGGTGCTTAAGTCAGTTGTGAAAGTTTGCGGCTCAACCGT
AAAATTGCAGTTGATACTGGGTACCTTGAGTGCAGCATAGGTAGGCGGAATTCGTG
GTGTAGCGGTGAAATGCTTAGATATCACGAAGAACTCCGATTGCGAAGGCAGCTTA
CTGGACTGTAAGTACGCTGATGCTCGAAAGTGTGGGTATCAAACAGGATTAGATA
CCCTGGTAGTCCACACAGTAAACGATGAATACTCGCTGTTGGCGATACACAGTCAGC
GGCCAAGCGAAAGCATTAAGTATTCCACCTGGGGAGTACGCCGGCAACGGTGAAAC
TCAAAGGAATTGACGGGGGGCCCGCACAAAGCGGAGGAACATGTGGTTTAATTTCGATG
ATACGCGAGGAACCTTACCCGGGCTTAAATTGCAGCGGAATGTAGTGGAACATTA
CAGCCTTCGGGCGCGTGTGAAGGTGCTGCATGGTTGTCGTCAGCTCGTGCCGTGAGG
TGTCGGCTTAAGTGCCATAACGAGCGCAACCCTTATCTATAGTTACTATCAGGTCAT
GCTGAGGACTCTATGGAGACTGCCGTCGTAAGATGTGAGGAAGGTGGGGATGACGT
CAAATCAGCACGGCCCTTACGTCCGGGGCTACACACGTGTTACAATGGGGGGTACA
GAAGGCAGCTACCTGGCGACAGGATGCTAATCCCTAAAACCTCTCTCAGTTCGGATT
GGAGTCTGCAACCCGACTCCATGAAGCTGGATTTCGCTAGTAATCGCGCATCAGCCAC
GGCGCGGTGAATACGTTCCCGGGCCTTGTACACACCGCCCGTCAAGCCATGAAAGC
CGGGGGTACCTGAAGTACGTAACCGCAAGGAGCGTCCTAGGGTAAAACTGGTGATT
GGGGCTAAGTCGTAACAAGGTAGCCGTACCGGAAGGTGCGGCTGGAACACCTCCTT
T (SEQ ID NO: 15)

NB2-B26FMU *Roseburia inulinivorans*

ACTGAGTGGCGGACGGGTGAGTAACGCGTGGGTAACCTGCCTCACACAGGGGGATA
ACAGTTGGAAACGGCTGCTAATACCGCATAAGCGCACAGTACCGCATGGTACAGTG
TGAAAAACTCCGGTGGTGTGAGATGGACCCGCGTCTGATTAGCTAGTTGGCAGGGC
AACGGCCTACCAAGGCGACGATCAGTAGCCGACCTGAGAGGGTGACCGGCCACATT
GGGACTGAGACACGGCCCAAACCTCCTACGGGAGGCAGCAGTGGGGAATATTGCACA
ATGGGGGAAACCCTGATGCAGCGACGCCGCGTGAGCGAAGAAGTATTTCCGTATGT
AAAGCTCTATCAGCAGGGAAGAAGAAATGACGGTACCTGACTAAGAAGCACCGGCT
AAATACGTGCCAGCAGCCGCGGTAATACGTATGGTGCAAGCGTTATCCGGATTTACT
GGGTGTAAAGGGAGCGCAGGCGGAAGGCTAAGTCTGATGTGAAAGCCCGGGGCTCA
ACCCCGGTACTGCATTGGAACTGGTCATCTAGAGTGTGCGAGGGGTAAGTGGAAT
TCCTAGTGTAGCGGTGAAATGCGTAGATATTAGGAGGAACACCAGTGGCGAAGGCG
GCTTACTGGACGATAACTGACGCTGAGGCTCGAAAGCGTGGGGAGCAAACAGGATT
AGATAACCCTGGTAGTCCACGCCGTAAACGATGAATACTAGGTGTCGGAAAGCACAG
CTTTTCGGTGCCGCCGCAAACGCATTAAGTATTCCACCTGGGGAGTACGTTTCGAAG
AATGAAACTCAAAGGAATTGACGGGGACCCGCACAAGCGGTGGAGCATGTGGTTTA
ATTCGAAGCAACGCGAAGAACCTTACCAAGTCTTGACATCCCGGTGACCGGACAGT
AATGTGTCCTTTTCTTCGGAACACCGGTGACAGGTGGTGTCATGGTTGTCGTCAGCTC
GTGTCGTGAGATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCTTATCCCCAGTAGC
CAGCATTTTGGATGGGCACTCTGAGGAGACTGCCAGGGATAACCTGGAGGAAGGTG
GGGATGACGTCAAATCATCATGCCCTTATGACTTGGGCTACACACGTGCTACAATG

Anexo A

GCGTAAACAAAGGGAAGCGAGACCGTGAGGTGGAGCAAATCCCCAAAATAACGTC
TCAGTTCGGACTGTAGTCTGCAACCCGACTACACGAAGCTGGAATCGCTAGTAATCG
CAGATCAGAATGCTGCGGTGAATACGTTCCCGGGTCTTGTACACACCGCCCGTCACA
CCATGGGAGTTGGAAATGCCCCAAGTCAGTGACCCAACCGCAAGGAGGGAGCTGCC
GAAGGCAGGTTTCGATAACTGGGGTGAAGTCGTAACAAGGTAGCCGTATCGGAAGGT
GCGGCTGGATCACCTCCTTT (SEQ ID NO: 16)

NB2-B20DS [*Clostridium*] hylemonae

ACGAGAGTTTGATCCTGGCTCAGGACGAACGCTGGCGGCGTGCCTAACACATGCAA
GTCGAACGAGAATCTTTGGGATGATTCTTTTCGGGATGAATTCCAAAGAGGAAAGTG
GCGGACGGGCGAGTAACGCGTGAGTAACCTGCCCATAAGAGGGGGATAATCCATGG
AAACGTGGACTAATACCGCATATTGTAGTTAAGTTGCATGACTTGATTATGAAAGAT
TTATCGCTTATGGATGGACTCGCGTCAGATTAGATAGTTGGTGAGGTAACGGCTCAC
CAAGTCAACGATCTGTAGCCGAACCTGAGAGGTTGATCGGCCGCATTGGGACTGAGA
CACGGCCCAGACTCCTACGGGAGGCAGCAGTGGGGAATATTGCGCAATGGGGGCAA
CCCTGACGCAGCAACGCCGCGTGCAGGAAGAAGGTCTTCGGATTGTAACTGTTGTC
GCAAGGGAAGAAGACAGTGACGGTACCTTGTGAGAAAGTCACGGCTAACTACGTGC
CAGCAGCCGCGGTAATACGTAGGTGACAAGCGTTGTCCGGATTTACTGGGTGTAAA
GGGCGCGTAGGCGGACTGTCAAGTCAGTCGTGAAATACCGGGGCTTAACCCCGGGG
CTGCGATTGAAACTGACAGCCTTGAGTATCGGAGAGGAAAGCGGAATTCCTAGTGT
AGCGGTGAAATGCGTAGATATTAGGAGGAACACCAGTGGCGAAGGCGGCTTTCTGG
ACGACAACCTGACGCTGAGGCGCGAAAGTGTGGGGAGCAAACAGGATTAGATACCCT
GGTAGTCCACACCGTAAACGATGGATACTAGGTGTAGGAGGTATCGACCCCTTCTGT
GCCGCAGTTAACACAATAAGTATCCCACCTGGGGAGTACGACCGCAAGGTTGAAAC
TCAAAGGAATTGACGGGGGCCCCGCACAAGCAGTGGAGTATGTGGTTTAATTCGAAG
CAACGCGAAGAACCTTACCTGGGCTTGACATCCCTGGAATCGAGTAGAGATACTTG
AGTGCCTTCGGGAATCAGGTGACAGGTGGTGCATGGTTGTCTCAGCTCGTGTCTGTG
AGATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCCTATTGTCAGTTGCCATCATT
AGTTGGGCACTCTGGCGAGACTGCCGGTGACAAATCGGAGGAAGGTGGGGACGACG
TCAAATCATCATGCCCCCTTATGCCCAGGGCTACACACGTAATAACAATGGCCGATAAC
AAAGTGCAGCGAAACCGTGAGGTGGAGCGAATCACAAAACCTCGGTCTCAGTTCAGA
TTGCAGGCTGCAACTCGCCTGCATGAAGTTGGAATTGCTAGTAATCGCGGATCAGAA
TGCCGCGGTGAATACGTTCCCGGGCCTTGTACACACCGCCCGTCACACCATGAGAGT
CGATAACACCCGAAGCCTGTGAGCTAACCTTTTAGGAGGCAGCAGTCGAAGGTGGG
GTTGATGATTGGGGTGAAGTCGTAACAAGGTAGCCGTATCGGAAGGTGCGGCTGGA
TCACCTCCTTT (SEQ ID NO: 17)

NB2-B3WC *Barnesiella intestinihominis*

CGGCGACCGGCGCACGGGTGAGTAACACGTATGCAATCCACCTGTAACAGGGGGAT
AACCCGGAGAAATCCGGACTAATACCCCATATATGGGCGCTCCGCATGGAGAGCC
CATTAAAGAGAGCAATCTTGTTACAGACGAGCATGCGCTCCATTAGCCAGTTGGCG
GGGTAACGGCCCACCAAGGCGACGATGGATAGGGGTTCTGAGAGGAAGGTCCCCCA
CATTGGAACCTGAGACACGGTCCAAACTCCTACGGGAGGCAGCAGTGAGGAATATTG
GTCAATGGTTCGGCAGACTGAACCAGCCAAGTCGCGTGAGGGAAGACGGCCCTACGG
GTTGTAAACCTCTTTTGTCTCGGAGAGTAAAGTACGCTACGTGTAGCGTATTGCAAGTA

Anexo A

TCCGAAGAAAAAGCATCGGCTAACTCCGTGCCAGCAGCCGCGGTAATACGGAGGAT
GCAAGCGTTATCCGGATTTATTGGGTTTAAAGGGTGCGTAGGCGGCACGCCAAGTCA
GCGGTGAAATTTCCGGGCTCAACCCGGAGTGTGCCGTTGAAACTGGCGAGCTAGAG
TGCACAAGAGGCAGGCGGAATGCGTGGTGTAGCGGTGAAATGCATAGATATCACGC
AGAACCCCGATTGCGAAGGCAGCCTGCTAGGGTGAAACAGACGCTGAGGCACGAA
AGCGTGGGTATCGAACAGGATTAGATAACCCTGGTAGTCCACGCAGTAAACGATGAA
TACTAACTGTTTGCATACAATGTAAGCGGTACAGCGAAAGCGTTAAGTATTCCACC
TGGGGAGTACGCCGGCAACGGTGAAACTCAAAGGAATTGACGGGGGGCCCGCACAA
GCGGAGGAACATGTGGTTTAATTTCGATGATACGCGAGGAACCTTACCCGGGCTCAA
ACGCAGGGGGAATATATATGAAAGTATATAGCTAGCAATAGTCACCTGCGAGGTGC
TGCATGGTTGTCGTCAGCTCGTGCCGTGAGGTGTCGGCTTAAGTGCCATAACGAGCG
CAACCCCTATGGACAGTTACTAACGGGTGAAGCCGAGGACTCTGTGCGAGACTGCCG
GCGCAAGCCGCGAGGAAGGTGGGGATGACGTCAAATCAGCACGGCCCTTACGTCCG
GGGCGACACACGTGTTACAATGGCAGGTACAGAAGGCAGCCAGTCAGCAATGACGC
GCGAATCCCGAAAACCTGTCTCAGTTTCGGATTGGAGTCTGCAACCCGACTCCATGAA
GCTGGATTGCTAGTAATCGCGCATCAGCCATGGCGCGGTGAATACGTTCCCGGGCC
TTGTACACACCCCGCCGTCAAGCCATGGAAGCCGGGAGTACCTGAAGCATGCAACCG
CAAGGAGCGTACGAAGGTAATACCGGTAACCTGGGGCTAAGTCGTAACAAGGTAGCC
GTACCGGAAGGTGCGGCTGGAACACCTCCTTT (SEQ ID NO: 18)

NB2-A14DS [Clostridium] aerotolerans

TTCCTTAGAAAGGAGGTGATCCAGCCGCACCTTCCGATACGGCTACCTTGTTACGAC
TTCACCCAGTTATCAGTCCCGCCTTCGGCAGCTCCCTCCTTRCGGTTGGGTCACTGA
CTTCGGGCGTTACCAACTCCCATGGTGTGACGGGCGGTGTGTACAAGACCCGGGAA
CGTATTCACCGCGACATTCTGATTGCGGATTACTAGCGATTCCAGCTTCATGTAGTCG
AGTTGCAGACTACAATCCGAAGTGAAGACGTTATTTTTGAGATTTGCTTAAGCTCACA
CTCTCGCTTCCTTTGTTTACGCCATTGTAGCACGTGTGTAGCCCAAGTCATAAGGGG
CATGATGATTTGACGTCATCCCCACCTTCCTCCAGGTATCCCTGGCAGTCTCTCCAG
AGTGCCCGACCGAATCGCTGGCTACTGAAGATAAGGGTTGCGCTCGTTGCGGGACTT
AACCCAACATCTCACGACACGAGCTGACGACAACCATGCACCACCTGTCACCGATG
CTCCGAAGAGAAGGYCCATTACRRACCGGTATCGGGATGTCAAGACTTGGTAAG
GTTCTTCGCGTTGCTTCGAATTAACACATGCTCCACCGCTTGTGCGGGTCCCCGTC
AATTCCTTTGAGTTTCATTCTTGCGAACGTACTCCCCAGGTGGAATACTTATTGCGTT
TGCGGCGGCACCGAAGAGCTGTGCTCCCCGACACCTAGTATTCATCGTTTACGGCGT
GGACTACCAGGGTATCTAATCCTGTTTGCTCCCCACGCTTTCGAGCCTCAACGTCAG
TACTGTCCAGTAAGCCGCCTTCGCCACTGGTGTTCCTCCTAATATCTACGCATTTCA
CCGCTACACTAGGAATTCCGCTTACCTCTCCAGCACTCTAGCCAAACAGTTTCAAAA
GCAGTCCCGGGGTTGAGCCCCAGCCTTTCACCTTCTGACTTGCTTARCCGTCTACGCTC
CCTTTACACCCAGTAAATCCGGATAACGCTTGCCCCCTACGTATTACCGCGGCTGCT
GGCACGTAGTTAGCCGGGGCTTCTTAGTCAGGTACCGTCATTTTCTTCCCTGCTGATA
GAGCTTTACATAACCGAAATACTTCTTCACTCACGCGGCGTCGCTGCATCAGGGTTTC
CCCCATTGTGCAATATTCCCCACTGCTGCCTCCCGTAGGAGTTTGGGCCGTGTCTCA
GTCCCAATGTGGCCGTTACCCCTCTCAGGCCGGCTATGGATCGTCGCCTTGGTAGGC
CGTTACCCTGCCAACTAGCTAATCCAACGCGGGTCCATCTCACACCGATAAATCTTT
TCCGTCCGGGCCATGCGGCCCTAGCGGGTATGCGGTATTAGCGGTGCTTTCCAACCT
GTTATCCCCCTGTGTGAGGCAGGTTACCCACGCGTTACTACCCGTCCGCCACTAAG

Anexo A

TCGCAAGAGAAATCATCCGAAGAATCAATCTCAAGCGCTTCGTTGACTTGTCATGTG
TTAAGCACGCCGCCAGCGTTCATCCTGAGCCAGGATCAAACCTCTCGATTAA (SEQ ID
NO: 19)

NB2-A15DCM *Bacteroides stercorisoris*

ATGAAGAGTTTGATCCTGGCTCAGGATGAACGCTAGCTACAGGCTTAACACATGCA
AGTCGAGGGGGCAGCATGACCTAGCAATAGGTTGATGGCGACCGGGCGCACGGGTGAG
TAACACGTATCCAACCTACCGGTTATTCCGGGATAGCCTTTTCGAAAGAAAGATTAAT
ACCGGATAGTATAACGAGAAGGCATCTTCTTGTTATTAAAGAATTTTCGATAACCGAT
GGGGATGCGTTCCATTAGTTTGTGTTGGCGGGGTAACGGCCCAACCAAGACATCGATGG
ATAGGGGTTCTGAGAGGAAGGTCCCCCACATTGGAAGTGAAGACACGGTCCAACTC
CTACGGGAGGCAGCAGTGAGGAATATTGGTCAATGGACGAGAGTCTGAACCAGCCA
AGTAGCGTGAAGGATGACTGCCCTATGGGTTGTAACTTCTTTTATATGGGAATAAA
GTGAGCCACGTGTGGCTTTTTGTATGTACCATACGAATAAGGATCGGCTAACTCCGT
GCCAGCAGCCGCGGTAATACGGAGGATCCGAGCGTTATCCGGATTTATTGGGTTTAA
AGGGAGCGTAGGGCGGACTATTAAGTCAGCTGTGAAAGTTTGCGGCTCAACCGTAAA
ATTGCAGTTGATACTGGTCGTCTTGAGTGCAGTAGAGGTAGGCGGAATTCGTGGTGT
AGCGGTGAAATGCTTAGATATCACGAAGAACTCCGATTGCGAAGGCAGCTTACTGG
ACTGTAAGTACGCTGATGCTCGAAAGTGTGGGTATCAAACAGGATTAGATACCCTG
GTAGTCCACACAGTAAACGATGAATACTCGCTGTTTGCGATATACAGCAAGCGGCC
AAGCGAAAGCATTAAAGTATTCCACCTGGGGAGTACGCCGGCAACGGTGAAACTCAA
AGGAATTGACGGGGGGCCCGCACAAAGCGGAGGAACATGTGGTTTAATTTCGATGATAC
GCGAGGAACCTTACCCGGGCTTAAATTGCAAATGAATATAGTGGAACATTATAGC
CGCAAGGCATTTGTGAAGGTGCTGCATGGTTGTCGTCAGCTCGTGCCGTGAGGTGTC
GGCTTAAGTGCCATAACGAGCGCAACCCTTATCTTTAGTTACTAACAGGTCATGCTG
AGGACTCTAGAGAGACTGCCGTCGTAAGATGTGAGGAAGGTGGGGATGACGTCAAA
TCAGCACGGCCCTTACGTCCGGGGCTACACACGTGTTACAATGGGGGGTACAGAAG
GCAGCTACACAGCGATGTGATGCTAATCCCAAAGCCTCTCTCAGTTCGGATTGGAG
TCTGCAACCCGACTCCATGAAGCTGGATTGCTAGTAATCGCGCATCAGCCACGGCG
CGGTGAATACGTTNCNCGGGCCTTGTACACACCGCCCGTCAAGCCATGAAAGCCGGG
GGTACCTGAAGTCCGTAACCGCAAGGAG (SEQ ID NO: 20)

NB2-A20GAM *Flavonifractor plautii*

TATTGAGAGTTTGATCCTGGCTCAGGATGAACGCTGGCGGGCGTGCTTAACACATGCA
AGTCGAACGGGGTGCTCATGACGGAGGATTTCGTCCAACGGATTGAGTTACCTAGTG
GCGGACGGGTGAGTAACGCGTGAGGAACCTGCCTTGAGAGGGGGGATAAACTCCG
AAAGGAGTGCTAATAACCGCATGATGCAGTTGGGTGCGCATGGCTCTGACTGCCAAAG
ATTTATCGCTCTGAGATGGCCTCGCGTCTGATTAGCTAGTAGGTGGGGTAACGGCCC
ACCTAGGCGACGATCAGTAGCCGACTGAGAGGTTGACCGGCCACATTGGGACTGA
GACACGGCCCAGACTCCTACGGGAGGCAGCAGTGGGGAATATTGGGCAATGGGCGC
AAGCCTGACCCAGCAACGCCGCGTGAAGGAAGAAGGCTTTTCGGGTTGTAACTTCT
TTTGTGACGGGACGAAACAAATGACGGTACCTGACGAATAAGCCACGGCTAACTACG
TGCCAGCAGCCGCGGTAATACGTAGGTGGCAAGCGTTATCCGGATTTACTGGGTGTA
AAGGGCGTGTAGGCGGGATTGCAAGTCAGATGTGAAAAGTGGGGGCTCAACCTCCA
GCCTGCATTTGAAACTGTAGTTCTTGAGTGCTGGAGAGGCAATCGGAATTCCGTGTG

Anexo A

TAGCGGTGAAATGCGTAGATATACGGAGGAACACCAGTGGCGAAGGCGGATTGCTG
GACAGTAACTGACGCTGAGGCGCGAAAGCGTGGGGAGCAAACAGGATTAGATACCC
TGGTAGTCCACGCCGTAAACGATGGATACTAGGTGTGGGGGGTCTGACCCCCTCCGT
GCCGCAGTTAACACAATAAGTATCCCACCTGGGGAGTACGATCGCAAGGTTGAAAC
TCAAAGGAATTGACGGGGGCCCCGCACAAGCGGTGGAGTATGTGGTTTAATTCGAAG
CAACGCGAAGAACCTTACCAGGGCTTGACATCCCCTAACGAAGCAGAGATGCATT
AGGTGCCCTTCGGGGAAAGTGGAGACAGGTGGTGCATGGTTGTCGTCAGCTCGTGTC
GTGAGATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCTTATTGTTAGTTGCTACGC
AAGAGCACTCTAGCGAGACTGCCGTTGACAAAACGGAGGAAGGTGGGGACGACGTC
AAATCATCATGCCCCTTATGTCCTGGGCCACACACGTACTACAATGGTGGTTAACAG
AGGGAGGCAAAACCGCGAGGTGGAGCAAATCCCTAAAAGCCATCCCAGTTCGGATT
GCAGGCTGAAACCCGCCTGTATGAAGTTGGAATCGCTAGTAATCGCGGATCAGCAT
GCCGCGGTGAATACGTTCCCGGGCCTTGTACACACCGCCCGTCACACCATGAGAGTC
GGGAACACCCGAAGTCCGTAGCCTAACCG (SEQ ID NO: 21)

NB2-A3NA *Dorea longicatena*

GCATGGTACAGTGGTAAAACTCCGGTGGTATGAGATGGACCCGCGTCTGATTAGG
TAGTTGGTGGGGTAACGGCCTACCAAGCCGACGATCAGTAGCCGACCTGAGAGGGT
GACCGGCCACATTGGGACTGAGACACGGCCCAGACTCCTACGGGAGGCAGCAGTGG
GGAATATTGCACAATGGAGGAACTCTGATGCAGCGACGCCGCGTGAAGGATGAAG
TATTTCCGTATGTAACTTCTATCAGCAGGGAAGAAAATGACGGTACCTGACTAAGA
AGCCCCGGCTAACTACGTGCCAGCAGCCGCGGTAAATACGTAGGGGGCAAGCGTTAT
CCGGATTTACTGGGTGTAAAGGGAGCGTAGACGGCACGGCAAGCCAGATGTGAAAG
CCCGGGGCTCAACCCCGGGACTGCATTTGGAAGTCTGAGCTAGAGTGTTCGGAGAG
GCAAGTGGAAATTNCTAGTGTAGCGGTGAAATGCGTAGATATTAGGAGGAACACCAG
TGGCGAAGGCGGCTTGCTGGACGATGACTGACGTTGAGGCTCGAAAGCGTGGGGAG
CAAACAGGATTAGATACCCTGGTAGTCCACGCCGTAAACGATGACTGCTAGGTGTC
GGGTGGCAAAGCCATTCGGTGCCGCAGCTAACGCAATAAGCAGTCCACCTGGGGAG
TACGTTTCGCAAGAATGAACTCAAAGGAATTGACGGGGACCCGCACAAGCGGTGGA
GCATGTGGTTTAATTCGAAGCAACGCGAAGAACCTTACCTGATCTTGACATCCCGAT
GACCGCTTCGTAATGGAAGNTTTTCTTCGGAACATCGGTGACAGGTGGTGCATGGTT
GTCGTCAGCTCGTGTCGTGAGATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCCTA
TCTTCAGTAGCCAGCAGGTTAAGCTGGGCACTCTGGAGAGACTGCCAGGGATAACC
TGGAGGAAGGTGGGGATGACGTCAAATCATCATGCCCCTTATNACCAGGGCTACAC
ACGTGCTACAATGGCGTAAACAAAGAGACGCGAACTCGCGAGGGTAAGCAAATCTC
AAAAATAACGTCTCAGTTCGGATTGTAGTCTGCAACTCGACTACATGAAGCTGGAAT
CGCTAGTAATCGCAGATCAGAATGCTGCGGTGAATACGTTCCCGGGTCTTGACACA
CCGCCCGTCACACCATGGGAGTCAGTAACGCCCGAAGTCAGTGACCCAACCGTAAG
GAGGGAGCTGCCGAAGGTGGGACCGATAACTGGGGTGAAGTCGTAACAAGGTAGCC
GTATCGGAAGGTGCGGCTGGATCACCTCCTTT (SEQ ID NO: 22)

NB2-A5TSAB *Blautia stercoris*

TTCGCTTCCCTCTGTTTACGCCATTGTAGCACGTGTGTAGCCCAAATCATAAGGGGC
ATGATGATTTGACGTCATCCCCACCTTCCTCCAGGTTATCCCTGGCAGTCTCCTCAGA
GTGCCCACCATTACATGCTGGCTACTGGGGATAGGGGTTCGCTCGTTGCGGGACTT

Anexo A

AACCCAACATCTCACGACACGAGCTGACGACAACCATGCACCACCTGTCTTGCCTGT
CCCGAAGGAAAGGTGACGTTACTCACCGGTCAGGCAGATGTCAAGACTTGGTAAGG
TTCTTCGCGTTGCTTCGAATTAAACCACATGCTCCACCGCTTGTGCGGGTCCCCGTCA
ATTCTTTGAGTTTCATTCTTGCGAACGTACTCCCCAGGTGGAATACTTAATGCGTTT
GCGGCGGCACCGAAGAGCTGTGCTCCCCGACACCTAGTATTCATCGTTTACGGCGTG
GACTACCAGGGTATCTAATCCTGTTTGCTCCCCACGCTTTCGAGCCTCAACGTCAGTT
ACCGTCCAGTAAGCCGCCTTCGCCACTGGTGTTCCTCCTAATATCTACGCATTTACC
GCTACACTAGGAATTCCGCTTACCCCTCCGGCACTCAAGCTTAACAGTTTCCAATGC
AGTCCCCGGGGTTAAGCCCCAGCCTTTCACATCAGACTTGTTATGCCGTCTACGCTCC
CTTTACACCCAGTAAATCCGGATAACGCTTGCCCCCTACGTATTACCGCGGCTGCTG
GCACGTAGTTAGCCGGGGCTTCTTAGTCAGGTACCGTCATTTTCTTCCCTGCTGATAG
AAGTTTACATAACCGAGATACTTCTTCCTTCACGCGGGCGTCGCTGCATCAGGGTTTCCC
CCATTGTGCAATATTCCCCACTGCTGCCTCCCGTAGGAGTCTGGGCGGTGTCTCAGT
CCCAATGTGGCCGTTACCCCTCTCAGGCCGGCTATGGATCGTCGCTTTGGTAGGCCG
TTACCCTGCCAACTGGCTAATCCAACGCGGGTCCATCTTATACCACCTCAGTTTTTCA
CACCGGGGCCATGCGGCCCTGTGCGCTTATGCGGTATTAGCAGCCATTTCTGACTGTT
ATCCCCCTGTATAAAGGCAGGTTACCCACGCGTTACTACCCGTCCGCCACTAGGATT
AAATCAAATCTGCCGAAGCTTCAATAAAATAATCCCCGTTGCACTTGCAATGTGTTAA
GCACGCCGCCAGCGTTCATCCTGAGCCAGGATCAAACCTCTCTGATAAAGTTTGATGT
CTCAAGACAACCAACTAGCTTAGTTATCTCTCGTCATTACTGTTTTAAAGTTCATTCT
TCCGAATGTGATTGTAAAAGAATTTTCGAGAATCGTATGTGTTTCACTGTTTAGTTAT
CAATGTTTCATTGCTTTTTACTGTCTCTCGACAGCTTATTTACTTTACCACATCTTTTTT
TGTTTGTCAACAACTTTTTTGAAGTTTTTCAAACTTTTTTTCCGAAGATGAAGTTTTGT
CATCCGTGTTGACGACTTGACTACTTTATCATAGATAAGTCAGTTTGTCAACAGG
(SEQ ID NO: 23)

NB2-B11FAA *Bifidobacterium longum*

GTGGAGGGTTCGATTCTGGCTCAGGATGAACGCTGGCGGGCGTGCTTAACACATGCA
AGTCGAACGGGATCCATCAGGCTTTGCTTGGTGGTGAGAGTGGCGAACGGGTGAGT
AATGCGTGACCGACCTGCCCCATACACCGGAATAGCTCCTGGAAACGGGTGGTAAT
GCCGGATGCTCCAGTTGATCGCATGGTCTTCTGGGAAAGCTTTCGCGGTATGGGATG
GGGTCGCGTCTATCAGCTTGACGGCGGGGTAACGGCCCCACCGTGCTTCGACGGG
TAGCCGGCCTGAGAGGGCGACCGGCCACATTGGGACTGAGATACGGCCCAGACTCC
TACGGGAGGCAGCAGTGGGGAATATTGCACAATGGGCGCAAGCCTGATGCAGCGAC
GCCGCGTGAGGGATGGAGGCCTTCGGGTTGTAAACCTCTTTTATCGGGGAGCAAGC
GAGAGTGAGTTTACCCGTTGAATAAGCACCGGCTAACTACGTGCCAGCAGCCGCGG
TAATACGTAGGGTGCAAGCGTTATCCGGAATTATTGGGCGTAAAGGGCTCGTAGGC
GGTTCGTCGCGTCCGGTGTGAAAGTCCATCGCTTAACGGTGGATCCGCGCCGGGTAC
GGGCGGGCTTGAGTGCGGTAGGGGAGACTGGAATTCCCGGTGTAACGGTGGAATGT
GTAGATATCGGGAAGAACACCAATGGCGAAGGCAGGTCTCTGGGCGGTTACTGACG
CTGAGGAGCGAAAGCGTGGGGAGCGAACAGGATTAGATAACCTGGTAGTCCACGCC
GTAAACGGTGGATGCTGGATGTGGGGCCCGTTCCACGGGTTCGCTGTCGGAGCTAAC
GCGTTAAGCATCCCGCCTGGGGAGTACGGCCGCAAGGCTAAAACTCAAAGAAATTG
ACGGGGGCCCCGCACAAGCGGCGGAGCATGCGGATTAATTCGATGCAACGCGAAGA
ACCTTACCTGGGCTTGACATGTTCCCGACGGTCGTAGAGATAACGGCTTCCCTTCGGG
GCGGGTTCACAGGTGGTGCATGGTTCGTGTCAGCTCGTGTGTCGTGAGATGTTGGGTTA

Anexo A

AGTCCCGCAACGAGCGCAACCCTCGCCCCGTGTTGCCAGCGGATTATGCCGGGAAC
TCACGGGGGACCGCCGGGGTTAACTCGGAGGAAGGTGGGGATGACGTCAGATCATC
ATGCCCCTTACGTCCAGGGCTTCACGCATGCTACAATGGCCGGTACAACGGGATGCC
ACGCGGCGACGCGGAGCGGATCCCTGAAAACCGGTCTCAGTTCGGATCGCAGTCTG
CAACTCGACTGCGTGAAGGCGGAGTCGCTAGTAATCGCGAATCAGCAACGTCGCGG
TGAATGCGTTCCCGGGCCTTGTACACACCGCCCGTCAAGTCATGAAAGTGGGCAGC
ACCCGAAGCCGGTGGCCTAACCCCTTGTGGGATGGAGCCGTCTAAGGTGAGGCTCG
TGATTGGGACTAAGTCGTAACAAGGTAGCCGTACCGGAAGGTGCGGCTGGATCACC
TCCTTT (SEQ ID NO: 24)

NB2-A2FAA *Coprococcus comes*

GAGAGTTTGATCCTGGCTCAGGATGAACGCTGGCGGCGTGCTTAACACATGCAAGTC
GAACGAAGCACCTGGATTTGATTCTTCGGATGAAGATCCTTGTGACTGAGTGGCGGA
CGGGTGAGTAACGCGTGGGTAACTGCCTCATAACAGGGGGATAACAGTTAGAAATG
ACTGCTAATACCGCATAAGACCACAGGGTCGCATGACCTGGTGGGAAAACTCCGG
TGGTATGAGATGGACCCGCGTCTGATTAGGTAGTTGGTGGGGTAACGGCCTACCAA
GCCGACGATCAGTAGCCGACCTGAGAGGGTGACCGGCCACATTGGGACTGAGACAC
GGCCCAAACCTCCTACGGGAGGCAGCAGTGGGGAATATTGCACAATGGGGGAAACCC
TGATGCAGCGACGCCGCGTGAGCGAAGAAGTATTCGGTATGTAAAGCTCTATCAG
CAGGGAAGAAAATGACGGTACCTGACTAAGAAGCACCGGCTAAATACGTGCCAGCA
GCCGCGGTAATACGTATGGTGCAAGCGTTATCCGGATTTACTGGGTGTAAAGGGAG
CGTAGACGGCTGTGTAAGTCTGAAGTGAAAGCCCGGGGCTCAACCCCGGGACTGCT
TTGGAAACTATGCAGCTAGAGTGTTCGGAGAGGTAAGTGGAATTCCCAGTGTAGCGG
TGAAATGCGTAGATATTGGGAGGAACACCAGTGGCGAAGGCGGCTTACTGGACGAT
GACTGACGTTGAGGCTCGAAAGCGTGGGGAGCAAACAGGATTAGATACCCTGGTAG
TCCACGCCGTAAACGATGACTACTAGGTGTTCGGGGAGCAAAGCTCTTCGGTGCCGC
AGCAAACGCAATAAGTAGTCCACCTGGGGAGTACGTTTCGCAAGAATGAAACTCAAA
GGAATTGACGGGGACCCGCACAAGCGGTGGAGCATGTGGTTTAATTGCAAGCAACG
CGAAGAACCTTACCTGCTCTTGACATCCCGGTGACCGGCATGTAATGATGCCTTTTC
TTCGGAACACCGGTGACAGGTGGTGATGGTTGTCGTCAGCTCGTGTGCTGAGATGT
TGGGTAAAGTCCCGCAACGAGCGCAACCCTTATCTTCAGTAGCCAGCATTTTCGGGTG
GGCACTCTGGAGAGACTGCCAGGGATAACCTGGAGGAAGGTGGGGATGACGTCAAA
TCATCATGCCCCTTATGAGCAGGGCTACACACGTGCTACAATGGCGTAAACAAAGG
GAAGCGAACCTGTGAGGGTAAGCAAATCTCAAAAATAACGTCTCAGTTCGGATTGT
AGTCTGCAACTCGACTACATGAAGCTGGAATCGCTAGTAATCGCGAATCAGCATGTC
GCGGTGAATACGTTCCCGGGTCTTGTACACACCGCCCGTCACACCATGGGAGTTGGT
AACGCCCCGAAGTCAGTGACTCAACCGTAAGGAGAGAGCTGCCGAAGGTGGGACCG
ATAACTGGGGTGAAGTCGTAACAAGGTAGCCGTATCGGAAGGTGCGGCTGGATCAC
CTCCTTT (SEQ ID NO: 25)

NB2-B6CNA [*Eubacterium*] *eligans*

TTCCTTAGAAAGGAGGTGATCCAGCCGCACCTTCCGATACGGCTACCTTGTTACGAC
TTCACCCCAGTTATCAAACCTGCCTTCGGCGGCTCCTTCTTTCGTTAGGTCACCGACT
TCGGGCATTTTCGACTCCCATGGTGTGACGGGCGGTGTGTACAAGACCCGGGAACGT
ATTCACCGCAGCATTCTGATCTGCGATTACTAGCGATTCCAGCTTCATGTAGTCGAG

Anexo A

TTGCAGACTACAATCCGAACTGAGACGTTATTTTTGTGATTTGCTTGGCCTCACGACT
TCGCTTCACTTTGTTTACGCCATTGTAGCACGTGTGTAGCCCAAGTCATAAGGGGCA
TGATGATTTGACGTCATCCCCACCTTCCTCCAGGTTATCCCTGGCAGTCTCCCTAGAG
TGCCCATCTTACTGCTGGCTACTAAGGATAGGGGTTGCGCTCGTTGCGGGACTTAAC
CCAACATCTCACGACACGAGCTGACGACAACCATGCACCACCTGTCTCCACTGTCCC
GAAGGAAAGGACACATTACTGTCCGGTCAGTGGGATGTCAAGACTTGGTAAGGTTTC
TTCGCGTTGCTTCGAATTAAACCACATGCTCCACCGCTTGTGCGGGTCCCCGTCAATT
CCTTTGAGTTTCATTCTTGCGAACGTACTCCCCAGGTGGAATACTTATTGCGTTTGCT
GCGGCACCGAAGCCCTTATGGGCCCCGACACCTAGTATTCATCGTTTACGGCGTGGA
CTACCAGGGTATCTAATCCTGTTTGCTCCCCACGCTTTCGAGCCTCAGTGTCAGTTAC
AGTCCAGTGAGCCGCCTTCGCCACTGGTGTTCTCTCTAATATCTACGCATTTACCCGC
TACACTAGGAATTCACCTCACCCCTCCTGCACTCCAGCCTTACAGTTTCAAAGCAG
TTCCGGGGTTGAGCCCCGGATTTTCACTTCTGACTTGTCATGGCCACCTACACTCCCTT
TACACCCAGTAAATCCGGATAACGCTTGCTCCATACGTATTACCGCGGCTGCTGGCA
CGTATTTAGCCGGAGCTTCTTAGTCAGGTACCGTCACTATCTTCCCTGCTGATAGAGC
TTTACATAACGAATTACTTCTTCACTCACGCGGCGTCGCTGCATCAGAGTTTCTCTCA
TTGTGCAATATCCCCACTGCTGCCTCCCGTAGGAGTCTGGGCGGTGTCTCAGTCCC
AATGTGGCCGGTCACCTCTCAGGTCGGCTACTGATCGTCGCCTTGGTGGGCTGTTA
TCTCACCAACTAGCTAATCAGACGCGGGTCCATCTTATACCACCGGAGTTTTTCA
CCATGTCATGCAACATTGTGCGCTTATGCGGTATTACCAGCCGTTTCCAGCTGCTATC
CCCCAGTACAAGGCAGGTTACCCACGCGTACTCACCCGTCCGCCACTCAGTCATAA
AGAACTTCAAACCGAAGTAATCCGTTCTAAATGCTTCGTTGCACTTGTCATGTGTTAA
GCACGCCGCCAGCGTTCATCCTGAGCCAGGATCAAACCTCTCATA (SEQ ID NO: 26)

NB2-BAERMRS02 *Lactobacillus paracasei*

CCAAGGCGATGATACGTAGCCGAACTGAGAGGTTGATCGGCCACATTGGGACTGAG
ACACGGCCCAAACCTCCTACGGGAGGCAGCAGTAGGGAATCTTCCACAATGGACGCA
AGTCTGATGGAGCAACGCCGCGTGAGTGAAGAAGGCTTTCGGGTCGTAAAACCTCTG
TTGTTGGAGAAGAATGGTCGGCAGAGTAACTGTTGNCGNCGTGACGGTATCCAACC
AGAAAGCCACGGCTAACTACGTGCCAGCAGCCGCGGTAATACGTAGGTGGCAAGCG
TTATCCGGATTTATTGGGCGTAAAGCGAGCGCAGGCGGTTTTTTAAGTCTGATGTGA
AAGCCCTCGGCTTAACCGAGGAAGCGCATCGGAAACTGGGAAACTTGAGTGCAGAA
GAGGACAGTGGAACCTCATGTGTAGCGGTGAAATGCGTAGATATATGGAAGAACAC
CAGTGGCGAAGGCGGCTGTCTGGTCTGTAACCTGACGCTGAGGCTCGAAAGCATGGG
TAGCGAACAGGATTAGATACCCTGGTAGTCCATGCCGTAAACGATGAATGCTAGGT
GTTGGAGGGTTTCCGCCCTTCAGTGCCGCAGCTAACGCATTAAGCATTCCGCCTGGG
GAGTACGACCGCAAGGTTGAAACTCAAAGGAATTGACGGGGGCCCCGCACAAGCGGT
GGAGCATGTGGTTTAATTCGAAGCAACGCGAAGAACCTTACCAGGTCTTGACATCTT
TTGATCACCTGAGAGATCAGGTTTCCCCTTCGGGGGCAAAATGACAGGTGGTGCATG
GTTGTCGTCAGCTCGTGTCGTGAGATGTTGGGTAAAGTCCCGCAACGAGCGCAACCC
TTATGACTAGTTGCCAGCATTTAGTTGGGCACTCTAGTAAGACTGCCGGTGACAAAC
CGGAGGAAGGTGGGGATGACGTCAAATCATCATGCCCTTATGACCTGGGCTACAC
ACGTGCTACAATGGATGGTACAACGAGTTGCGAGACCGCGAGGTCAAGCTAATCTC
TTAAAGCCATTCTCAGTTCGGACTGTAGGCTGCAACTCGCCTACACGAAGTCGGAAT
CGCTAGTAATCGCGGATCAGCACGCCGCGGTGAATACGTTCCCGGGCCTTGTACACA
CCGCCCGTACACCATGAGAGTTTGTAACACCCGAAGCCGGTGGCGTAACCTTTTA

Anexo A

GGGAGCGAGCCGTCTAAGGTGGGACAAATGATTAGGGTGAAGTCGTAACAAGGTAG
CCGTAGGAGAACCTGCGGCTGGATCACCTCCTTT (SEQ ID NO: 27)

NB2-B13CNA [*Clostridium*] *oroticum*

CCTTAGAAAGGAGGTGATCCAGCCGCACCTTCCGATACGGCTACCTTGTTACGACTT
CACCCCAGTTATCGGTCCCACCTTCGGCAGCTCCCTCCTTGCGGTTGGGTCACTGACT
TCGGGCGTTACCAACTCCCATGGTGTGACGGGCGGTGTGTACAAGACCCGGGAACG
TATTCACCGCGACATTCTGATTGCGGATTACTAGCGATTCCAGCTTCATGTAGTCGA
GTTGCAGACTACAATCCGAACCTGAGACGTTATTTTTGAGATTTGCTTACCCTCGCAG
GCTCGCTTCCCTTTGTTTACGCCATTGTAGCACGTGTGTAGCCCTGCTCATAAGGGGC
ATGATGATTTGACGTCATCCCCACCTTCCTCCAGGTTATCCCTGGCAGTCTCTCTAGA
GTGCCCCGGCCRWACCGCTGGCTACTAAAGATAGGGGTTGCGCTCGTTGCGGGACTT
AACCCAACATCTCACGACACGAGCTGACGACAACCATGCACCACCTGTCATCCCTGT
CCCGAAGGAAAGGCAACATTACTTGCCGGTCAGGGAGATGTCAAGAGCAGGTAAGG
TTCTTCGCGTTGCTTCGAATTAACCACATGCTCCACCGCTTGTCGGGGTCCCCGTCA
ATTCCTTTGAGTTTCATTCTTGCGAACGTACTCCCCAGGTGGACTACTTATTGCGTTG
GCTGCGGCACCGAATAGCTCTGCTACCCGACACCTAGTAGTCATCGTTTACGGCGTG
GACTACCAGGGTATCTAATCCTGTTTGCTCCCCACGCTTTCGAGCCTCAACGTCAGT
CATCGTCCAGCAAGCCGCCTTCGCCACTGGTGTTCCCTCCTAATATCTACGCATTTAC
CGCTACACTAGGAATTCCACTTGCCTCTCCGACACTCTAGTTCGACAGTTTCCAATG
CAGTCCCAGGGTTGAGCCCTGGCCTTTCACATCAGACTTGCCATACCGTCTACGCTC
CCTTTACACCCAGTAAATCCGGATAACGCTTGCCCCCTACGTATTACCGCGGCTGCT
GGCACGTAGTTAGCCGGGGCTTCTTAGTCAGGTACCGTCATTTTCTTCCCTGCTGATA
GAAGTTTACATAACCGAAATACTTCATCCTTCACGCGGCGTCGCTGCATCAGGGTTTC
CCCCATTGTGCAATATTCCCCACTGCTGCCTCCCGTAGGAGTTTGGGCCGTGTCTCA
GTCCCAATGTGGCCGGTCACCCTCTCAGGTCCGGCTACTGATCGTCGCCTTGGTAGGC
CGTTACCCACCAACYAGCTAATCAGACGCGGGTCCATCTCATAACCACCGGAGTTTT
TACCCCTGCACCATGCGGTGCTGTGGTCTTATGCGGTATTAGCAGYCATTCTAACT
GTTATCCCCCTGTATGAGGCAGGTTACCCACGCGTTACTACCCGTCCGCCACTCAG
TCACAAAAGTCTTCATCCGAAGAATCAAACCTTAAGTGCTTCGTTGACTTGCATGTG
TTAAGCACGCCGCCAGCGTTCATCCTGAGCCAGGATCAAACCTCTCGT (SEQ ID NO:
28)

NB2-B15DCM *Dorea formicigenerans*

TTAAACGAGAGTTTGATCCTGGCTCAGGATGAACGCTGGCGGCGTGCTTAACACATG
CAAGTCGAGCGAAGCACTTAAGTTCGATTCTTCGGATGAAGACTTTTGTGACTGAGC
GGCGGACGGGTGAGTAACGCGTGGGTAACCTGCCTCATAAGGGGGATAACAGTTA
GAAATGGCTGCTAATACCGCATAAGACCACAGTACTGCATGGTACAGTGGTAAAAA
CTCCGGTGGTATGAGATGGACCCGCGTCTGATTAGGTAGTTGGTGAGGTAACGGCCC
ACCAAGCCGACGATCAGTAGCCGACCTGAGAGGGTGACCGGCCACATTGGGACTGA
GACACGGCCCAGACTCCTACGGGAGGCAGCAGTGGGGAATATTGCACAATGGGCGA
AAGCCTGATGCAGCGACGCCGCGTGAAGGATGAAGTATTTCCGGTATGTAAACTTCTA
TCAGCAGGGAAGAAAATGACGGTACCTGACTAAGAAGCCCCGGCTAACTACGTGCC
AGCAGCCGCGGTAATACGTAGGGGGCAAGCGTTATCCGGATTTACTGGGTGTAAAG
GGAGCGTAGACGGCTGTGCAAGTCTGAAGTGAAAGGCATGGGCTCAACCTGTGGAC

Anexo A

TGCTTTGGAAACTGTGCAGCTAGAGTGTCTGGAGAGGTAAGTGGAATTCCTAGTGTAG
CGGTGAAATGCGTAGATATTAGGAGGAACACCAGTGGCGAAGGCGGCTTACTGGAC
GATGACTGACGTTGAGGCTCGAAAGCGTGGGGAGCAAACAGGATTAGATACCCTGG
TAGTCCACGCCGTAAACGATGACTGCTAGGTGTCTGGGTAGCAAAGCTATTCGGTGCC
GCAGCTAACGCAATAAGCAGTCCACCTGGGGAGTACGTTTCGCAAGAATGAAACTCA
AAGGAATTGACGGGGACCCGCACAAGCGGTGGAGCATGTGGTTTAATTCGAAGCAA
CGCGAAGAACCTTACCTGATCTTGACATCCCGATGACCGCTTCGTAATGGAAGCTTT
TCTTCGGAACATCGGTGACAGGTGGTGCATGGTTGTCTCAGCTCGTGTCTGTGAGAT
GTTGGGTAAAGTCCCGCAACGAGCGCAACCCTTATCTTCAGTAGCCAGCATTTAAGA
TGGGCACTCTGGAGAGACTGCCAGGGATAACCTGGAGGAAGGTGGGGATGACGTCA
AATCATCATGCCCCCTTATGACCAGGGCTACACACGTGCTACAATGGCGTAAACAAA
GGGAAGCAGAGCCGCGAGGGCCGAGCAAATCTCAAAAATAACGTCTCAGTTCGGATT
GTAGTCTGCAACTCGACTACATGAAGCTGGAATCGCTAGTAATCGCAGATCAGAAT
GCTGCGGTGAATACGTTCCCGGGTCTTGACACACCGCCCGTCACACCATGGGAGTC
AGTAACGCCCCGAAGTCAGTGACCCAACCGAAAGGAGGGAGCTGCCGAAGGTGGGA
CCGATAACTGGGGTGAAGTCGTAACAAGGTAGCCGTATCGGAAGGTGCGGCTGGAT
CACCTCCTTTCT (SEQ ID NO: 29)

NB2-BBHI1 *Escherichia coli*

ACGAGTGGCGGACGGGTGAGTAATGTCTGGGAAACTGCCTGATGGAGGGGGATAAC
TACTGGAAACGGTAGCTAATACCGCATAACGTCGCAAGACCAAAGAGGGGGACCTT
CGGGCCTCTTGCCATCGGATGTGCCCAGATGGGATTAGCTAGTAGGTGGGGTAACG
GCTCACCTAGGCGACGATCCCTAGCTGGTCTGAGAGGATGACCAGCCACACTGGAA
CTGAGACACGGTCCAGACTCCTACGGGAGGCAGCAGTGGGGAATATTGCACAATGG
GCGCAAGCCTGATGCAGCCATGCCGCGTGTATGAAGAAGGCCTTCGGGTTGTAAAG
TACTTTCAGCGGGGAGGAAGGGAGTAAAGTTAATACCTTTNCTCATTGACGTTACCC
GCAGAAGAAGCACCGGCTAACTCCGTGCCAGCAGCCGCGGTAATACGGAGGGTGCA
AGCGTTAATCGGAATTACTGGGCGTAAAGCGCACGCAGGCGGTTTGTTAAGTCAGA
TGTGAAATCCCCGGGCTCAACCTGGGAACTGCATCTGATACTGGCAAGCTTGAGTCT
CGTAGAGGGGGGTAGAATTCCAGGTGTAGCGGTGAAATGCGTAGAGATCTGGAGGA
ATACCGGTGGCGAAGGCGGCCCCCTGGACGAAGACTGACGCTCAGGTGCGAAAGCG
TGGGGAGCAAACAGGATTAGATACCCTGGTAGTCCACGCCGTAAACGATGTCGACT
TGGAGGTTGTGCCCTTGAGGCGTGGCTTCCGGAGCTAACGCGTTAAGTCGACCGCCT
GGGGAGTACGGCCGCAAGGTTAAACTCAAATGAATTGACGGGGGGCCCGCACAAAGC
GGTGGAGCATGTGGTTTAATTCGATGCAACGCGAAGAACCTTACCTGGTCTTGACAT
CCACNGAANTTTNCAGAGATGAGAATGTGCCTTCGGGAACNGTGAGACAGGTGCTG
CATGGCTGTCTCAGCTCGTGTGTGAAATGTTGGGTAAAGTCCCGCAACGAGCGCA
ACCCTTATCCTTTGTTGCCAGCGGTCCGGCCGGGAACTCAAAGGAGACTGCCAGTGA
TAACTGGAGGAAGGTGGGGATGACGTCAAGTCATCATGGCCCTTACGACCAGGGC
TACACACGTGCTACAATGGCGCATACAAAGAGAAGCGACCTCGCGAGAGCAAGCGG
ACCTCATAAAGTGCCTCGTAGTCCGGATTGGAGTCTGCAACTCGACTCCATGAAGTC
GGAATCGCTAGTAATCGTGGATCAGAATGCCACGGTGAATACGTTCCCGGGCCTTGT
ACACACCGCCCGTCACACCATGGGAGTGGGTTGCAAAAGAAGTAGGTAGCTTAACC
TTCGGGAGGGCGCTTACCACTTTGTGATTCATGACTGGGGTGAAGTCGTAACAAGGT
AACCGTAGGGGAACCTGCGGTTGGATCACCTCCTT (SEQ ID NO: 30)

Anexo A

NB2-B9DCM *Anaerostipes hadrus*

ATGAGAGTTTGATCCTGGCTCAGGATGAACGCTGGCGGCGTGCTTAACACATGCAA
GTCGAACGAAGCGCCTTATTTGATTTTCTTCGGAAGTGAAGATTTGGTGACTGAGTG
GCGGACGGGTGAGTAACGCGTGGGTAACCTGCCCTGTACAGGGGGATAACAATCAG
AAATGACTGCTAATAACCGCATAAGACCACAGCACCGCATGGTGCAGGGGTAAAAAC
TCCGGTGGTACAGGATGGACCCGCGTCTGATTAGCTGGTTGGTGAGGTAACGGCTCA
CCAAGGCGACGATCAGTAGCCGGCTTGAGAGAGTGAACGGCCACATTGGGACTGAG
ACACGGCCCAAACCTCCTACGGGAGGCAGCAGTGGGGAATATTGCACAATGGGGGGA
ACCCTGATGCAGCGACGCCGCGTGAGTGAAGAAGTATTTCCGGTATGTAAAGCTCTAT
CAGCAGGGAAGAAAATGACGGTACCTGACTAAGAAGCCCCGGCTAACTACGTGCCA
GCAGCCGCGGTAATACGTAGGGGGCAAGCGTTATCCGGAATTACTGGGTGTAAAGG
GTGCGTAGGTGGTATGGCAAGTCAGAAGTGAAGAACCCAGGGCTTAACCTCTGGGACT
GCTTTTGAAACTGTCAGACTGGAGTGCAGGAGAGGTAAGCGGAATTCCTAGTGTAG
CGGTGAAATGCGTAGATATTAGGAGGAACATCAGTGGCGAAGGCGGCTTACTGGAC
TGAAACTGACACTGAGGCACGAAAGCGTGGGGAGCAAACAGGATTAGATACCCTGG
TAGTCCACGCCGTAAACGATGAATACTAGGTGTCCGGGGCCGTAGAGGCTTCGGTGC
CGCAGCCAACGCAATAAGTATTCCACCTGGGGAGTACGTTTCGCAAGAATGAAACTC
AAAGGAATTGACGGGGACCCGCACAAGCGGTGGAGCATGTGGTTTAATTCGAAGCA
ACGCGAAGAACCTTACCTGGTCTTGACATCCTTCTGACCGGTCTTAACCGGACCTT
TCCTTCGGGACAGGAGTGACAGGTGGTGCATGGTTGTCGTCAGCTCGTGTCTGTGAGA
TGTTGGGTAAAGTCCCGCAACGAGCGCAACCCCTATCTTTAGTAGCCAGCATTTAAG
GTGGGCACTCTAGAGAGACTGCCAGGGATAACCTGGAGGAAGGTGGGGACGACGTC
AAATCATCATGCCCCTTATGACCAGGGCTACACACGTGCTACAATGGCGTAAACAG
AGGGAAGCAGCCTCGTGAGAGTGAGCAAATCCCAAAAATAACGTCTCAGTTCGGAT
TGTAGTCTGCAACTCGACTACATGAAGCTGGAATCGCTAGTAATCGCGAATCAGAAT
GTCGCGGTGAATACGTTCCCGGGTCTTGTACACACCGCCCGTCACACCATGGGAGTC
AGTAACGCCCCGAAGTCAGTGACCCAACCGTAAGGAGGGAGCTGCCGAAGGCGGGA
CCGATAACTGGGGTGAAGTCGTAACAAGGTAGCCGTATCGGAAGGTGCGGCTGGAT
CACCTCCTTT (SEQ ID NO: 31)

NB2-B9FAA *Blautia luti*

GTTGGTGGGGTAACGGCCCAACGAAGGCGACGATCCATAGCCGGCCTGAGAGGGTGA
ACGGCCACATTGGGACTGAGACACGGCCAGACTCCTACGGGAGGCAGCAGTGGGG
AATATTGCACAATGGGGGAAACCCTGATGCAGCGACGCCGCGTGAAGGAAGAAGTA
TCTCGGTATGTAACTTCTATCAGCAGGGAAGATAGTGACGGTACCTGACTAAGAA
GCCCCGGCTAACTACGTGCCAGCAGCCGCGGTAATACGTAGGGGGCAAGCGTTATC
CGGATTTACTGGGTGTAAAGGGAGCGTAGACGGTGTGGCAAGTCTGATGTGAAAGG
CATGGGCTCAACCTGTGGACTGCATTGGAACTGTCATACTTGAGTGCCGGAGGGGT
AAGCGGAATTCCTAGTGTAGCGGTGAAATGCGTAGATATTAGGAGGAACACCAGTG
GCGAAGGCGGCTTACTGGACGGTAACCTGACGTTGAGGCTCGAAAGCGTGGGGAGCA
AACAGGATTAGATACCCTGGTAGTCCACGCCGTAAACGATGAATACTAGGTGTCCG
GGAGCAAAGCTCTTCGGTGCCGTCGCAAACGCAGTAAGTATTCCACCTGGGGAGTA
CGTTCGCAAGAATGAACTCAAAGGAATTGACGGGGACCCGCACAAGCGGTGGAGC
ATGTGGTTTAATTCGAAGCAACGCGAAGAACCTTACCAAATCTTGACATCCCTCTGA
CCGGTCTTTAATCGGACCTTCTTTCGGAGCAGAGGTGACAGGTGGTGCATGGTTGT

Anexo A

CGTCAGCTCGTGTCTGAGATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCCTATC
CTCAGTAGCCAGCATTAAAGGTGGGCACTCTGGGGAGACTGCCAGGGATAACCTGG
AGGAAGGCGGGGATGACGTCAAATCATCATGCCCCTTATGATTTGGGCTACACACGT
GCTACAATGGCGTAAACAAAGGGAAGCGAGATCGTGAGATGGAGCAAATCCCAAA
AATAACGTCCCAGTTCGGACTGTAGTCTGCAACCCGACTACACGAAGCTGGAATCG
CTAGTAATCGCGGATCAGAATGCCGCGGTGAATACGTTCCCGGGTCTTGTACACACC
GCCCGTCACACCATGGGAGTCAGTAACGCCCGAAGTCAGTGACCTAACTGCAAAGA
AGGAGCTGCCGAAGGCGGGACCGATGACTGGGGTGAAGTCGTAACAAGGTAGCCGT
ATCGGAAGGTGCGGCTGGATCAC (SEQ ID NO: 32)

NB2-A7D5 [*Clostridium*] *scindens*

AACGAGAGTTTGATCCTGGCTCAGGATGAACGCTGGCGGCGTGCCTAACACATGCA
AGTCGAACGAAGCGCTTCCGCCTGATTTTCTTCGGAGATGAAGGCGGCTGCGACTGA
GTGGCGGACGGGTGAGTAACGCGTGGGCAACCTGCCTTGCACTGGGGGATAACAGC
CAGAAATGGCTGCTAATACCGCATAAGACCGAAGCGCCGCATGGCGCAGCGGCCAA
AGCCCCGGCGGTGCAAGATGGGCCCCGCTCTGATTAGGTAGTTGGCGGGGTAAACGG
CCCACCAAGCCGACGATCAGTAGCCGACCTGAGAGGGTGACCGGCCACATTGGGAC
TGAGACACGGCCCAGACTCCTACGGGAGGCAGCAGTGGGGAATATTGCACAATGGG
GGAAACCCTGATGCAGCGACGCCGCGTGAAGGATGAAGTATTTCCGGTATGTAACT
TCTATCAGCAGGGAAGAAGATGACGGTACCTGACTAAGAAGCCCCGGCTAACTACG
TGCCAGCAGCCGCGGTAATACGTAGGGGGCAAGCGTTATCCGGATTTACTGGGTGT
AAAGGGAGCGTAGACGGCGATGCAAGCCAGATGTGAAAGCCCCGGGGCTCAACCCC
GGGACTGCATTTGGAACCTGCGTGGCTGGAGTGTTCGGAGAGGCAGGCGGAATTCCTA
GTGTAGCGGTGAAATGCGTAGATATTAGGAGGAACACCAGTGGCGAAGGCGGCCTG
CTGGACGATGACTGACGTTGAGGCTCGAAAGCGTGGGGAGCAAACAGGATTAGATA
CCCTGGTAGTCCACGCCGTAAACGATGACTACTAGGTGTTCGGGTGGCAAGGCCATTC
GGTGCCGCAGCAAACGCAATAAGTAGTCCACCTGGGGAGTACGTTTCGCAAGAATGA
AACTCAAAGGAATTGACGGGGACCCGCACAAGCGGTGGAGCATGTGGTTTAATTCG
AAGCAACGCGAAGAACCTTACCTGATCTTGACATCCCGATGCCAAAGCGCGTAACG
CGCTCTTTCTTCGGAACATCGGTGACAGGTGGTGCATGGTTGTCGTCAGCTCGTGTC
GTGAGATGTTGGGTAAAGTCCCGCAACGAGCGCAACCCCTATCTTCAGTAGCCAGCA
TTCCGGATGGGCACTCTGGAGAGACTGCCAGGGACAACCTGGAGGAAGGTGGGGAT
GACGTCAAATCATCATGCCCCTTATGACCAGGGCTACACACGTGCTACAATGGCGTA
AACAAAGGGAGGCGAACCCGCGAGGGTGGGCAAATCCCAAAAATAACGTCTCAGTT
CGGATTGTAGTCTGCAACTCGACTACATGAAGCTGGAATCGCTAGTAATCGCGAATC
AGAATGTCGCGGTGAATACGTTCCCGGGTCTTGTACACACCGCCCGTCACACCATGG
GAGTCAGTAACGCCCGAAGCCGGTGACCCAACCCGCAAGGGAGGGAGCCGTCGAA
GGTGGGACCGATAACTGGGGTGAAGTCGTAACAAGGTAGCCGTATCGGAAGGTGCG
GCTGGATCACCTCCTTT (SEQ ID NO: 33)

NB2-B10MRS *Eubacterium desmolans*

TTTAGAGAGTTTGATCCTGGCTCAGGATGAACGCTGGCGGCGTGCCTAACACATGCA
AGTCGAACGGAGTCGTTTTGGAAAATCCTTCGGGATTGGAATTCTCGACTTAGTGGC
GGACGGGTGAGTAACGCGTGAGCAATCTGCCTTTAAGAGGGGGATAACAGTCGGAA
ACGGCTGCTAATACCGCATAAAGCATTGAATTCGCATGTTTTCGATGCCAAAGGAGC

Anexo A

AATCCGCTTTTAGATGAGCTCGCGTCTGATTAGCTAGTTGGTGGGGTAACGGCCCCAC
CAAGGCGACGATCAGTAGCCGACTGAGAGGTTGAACGGCCACATTGGGACTGAGA
CACGGCCCAGACTCCTACGGGAGGCAGCAGTGGGGAATATTGCGCAATGGGGGAAA
CCCTGACGCAGCAACGCCGCGTGATTGAAGAAGGCCTTCGGGTTGTAAAGATCTTTA
ATCAGGGACGAAAAATGACGGTACCTGAAGAATAAGCTCCGGCTAACTACGTGCCA
GCAGCCGCGGTAATACGTAGGGAGCAAGCGTTATCCGGATTTACTGGGTGTAAAGG
GCGCGCAGGCGGGCCGGCAAGTTGGAAGTGAAATCCGGGGGCTTAACCCCCGAAC
GCTTTCAAACCTGCTGGTCTTGAGTGATGGAGAGGCAGGCGGAATTCCGTGTGTAGC
GGTGAAATGCGTAGATATACGGAGGAACACCAGTGGCGAAGGCGGCCTGCTGGACA
TTAACTGACGCTGAGGCGCGAAAGCGTGGGGAGCAAACAGGATTAGATACCCTGGT
AGTCCACGCCGTAAACGATGGATACTAGGTGTGGGAGGTATTGACCCCTTCCGTGCC
GCAGTTAACACAATAAGTATCCCACCTGGGGAGTACGGCCGCAAGGTTGAAACTCA
AAGGAATTGACGGGGGGCCCGCACAAGCAGTGGAGTATGTGGTTTAATTCTGAAGCAA
CGCGAAGAACCTTACCAGGCCTTGACATCCCGATGACCGGCTTAGAGATAAGCCTTC
TCTTCGGAGCATCGGTGACAGGTGGTGCATGGTTGTCTCAGCTCGTGTCTGTGAGAT
GTTGGGTAAAGTCCCGCAACGAGCGCAACCCTTACGGTTAGTTGATACGCAAGATCA
CTCTAGCCGGACTGCCGTTGACAAAACGGAGGAAGGTGGGGACGACGTCAAATCAT
CATGCCCCCTTATGGCCTGGGCTACACACGTACTACAATGGCAGTCATACAGAGGGA
AGCAAAATCGCGAGGTGGAGCAAATCCCTAAAAGCTGTCCCAGTTCAGATTGCAGG
CTGCAACCCGCGCTGCATGAAGTCGGAATTGCTAGTAATCGCGGATCAGCATGCCGC
GGTGAATACGTTCCCGGGCCTTGTAACACACCGCCCGTCACACCATGAGAGCCGTCAA
TACCCGAAGTCCGTAGCCTAACCAGCAAGGAGGGCGCGGCCGAAGGTAGGGGTGGTA
ATTAGGGTGAAGTCGTAACAAGGTAGCCGTATCGGAAGGTGCGGCTGGATCACCTC
CTTT (SEQ ID NO: 34)

NB2-B19DCM *Faecalibacterium prausnitzii*

AGAAAGGAGGTGATCCAGCCGCAGGTTCTCCTACGGCTACCTTGTTACGACTTCACC
CCAATCACCAGTTTTACCTTCGGCGGCGTCTCCTTGCGGTTAGACTACCGACTTCG
GGTCCCCCGGCTCTCATGGTGTGACGGGCGGTGTGTACAAGGCCCGGGAACGTATT
CACCGTGGCATGCTGATCCACGATTACTAGCAATTCCGACTTCGTGCAGGCGAGTTG
CAGCCTGCAGTCCGAACCTGGGACGTTGTTTCTGAGTTTTGCTCCACCTCGCGGTCTTG
CTTCTCTTTGTTTAAACGCCATTGTAGTACGTGTGTAGCCCAAGTCATAAAGGGCATG
ATGATTTGACGTCATCCCCACCTTCCTCCGTTTTGTCAACGGCAGTCCTGCCAGAGTC
CTCTTGCGTAGTAACCTGACAGTAAGGGTTGCGCTCGTTGCGGGACTTAACCCAACAT
CTCACGACACGAGCTGACGACAACCATGCACCACCTGTCTCCTTGCTCCGAAGAGA
AAACATATTTCTATGTGCGTTCGCAGGATGTCAAGACTTGGTAAGGTTCTTCGCGTTG
CGTCGAATTAAACCACATACTCCACTGCTTGTGCGGGCCCCCGTCAATTCCTTTGAG
TTTCAACCTTGCGGTCGTAACCTCCCAACACCTAGTAATCATCGTTTACGGTGTGGACTACCAGGG
TATCTAATCCTGTTTGCTACCCACACTTTCGAGCCTCAGCGTCAGTTGGTGCCCAGTA
GGCCGCCTTCGCCACTGGTGTTCCTCCCGATATCTACGCATTCCACCGCTACACCGG
GAATTCCGCCTACCTCTGCACTACTCAAGAAAAACAGTTTTGAAAGCAGTTTATGGG
TTGAGCCCATAGATTTCACTTCCAACCTTGTCTTCCCGCCTGCGCTCCCTTTACACCCA
GTAATTCCGGACAACGCTTGTGACCTACGTTTTACCGCGGCTGCTGGCACGTAAGTTA
GCCGTCACTTCCTTGTTGAGTACCGTCATTATCTTCTCAACAACAGGAGTTTACAAT
CCGAAGACCTTCTTCTCCACGCGGCGTTCGCTGCATCAGGGTTTCCCCCATTTGTGCA

Anexo A

ATATTCCCCACTGCTGCCTCCCGTAGGAGTCTGGGCGGTGTCTCAGTCCCAATGTGG
CCGTTCAACCTCTCAGTCCGGCTACCGATCGTTGCCCTTGGTGGGCCATTACCTCACC
AACTAGCTAATCGGACGCGAGGCCATCTCAAAGCGGATTGCTCCTTTTCCCTCTGGT
CGATGCCGACCTGTGGGCTTATGCGGTATTAGCAGTCGTTTCCAACCTGTTGTCCCCCT
CTTTGAGGCAGGTTCCCTCACGCGTACTCACCCGTTCCGCACTCGCTYGAGAAAGCA
AGCTCTCTCTCGCTCGTTCGACTTGCATGTGTTAGGCGCGCCGCCAGCGTTCGTCCTG
AGCCAGGATCAAACCTCTTTATAAA (SEQ ID NO: 35)

NB2-A12BBE *Bacteroides ovatus*

CCGTGTCTCAGTTCCAATGTGGGGGACCTTCCTCTCAGAACCCCTATCCATCGTTGTC
TTGGTGGGCGGTTACCCCGCCAACAACTAATGGAACGCATCCCCATCGATAACCG
AAATTCTTTAATAGTAAAACCATGCGGTTTTAATATACCATCGGATATTAATCTTTCT
TTCGAAAGGCTATCCCCGAGTTATCGGCAGGTTGGATACGTGTTACTCACCCGTGCG
CCGGTCGCCATCTTTAGTTTGCAAGCAAATAAAATGCTGCCCTCGACTTGCATGT
GTTAAGCCTGTAGCTAGCGTTCATCCTGAGCTATTAAAGAATTTTCGGTTATCGATGG
GGATGCGTTCCATTAGTTTGTGTTGGCGGGGTAACGGCCCAACGAACAACGATGGAT
AGGGGTTCTGAGAGGAAGGTCCCCCACATTGGAAGTGAACACGGTCCAAACTCCT
ACGGGAGGCAGCAGTGAGGAATATTGGTCAATGGGCGAGAGCCTGAACCAGCCAA
GTAGCGTGAAGGATGAAGGCTCTATGGGTCGTAAACTTCTTTTATATGGGAATAAAG
TATTCCACGTGTGGAATTTTGTATGTACCATATGAATAAGGATCGGCTAACTCCGTG
CCAGCAGCCGCGGTAATACGGAGGATCCGAGCGTTATCCGGATTTATTGGGTTTAA
GGGAGCGTAGGTGGATTGTTAAGTCAGTTGTGAAAGTTTGCGGCTCAACCGTAAAAT
TGCAGTTGAAACTGGCAGTCTTGAGTACAGTAGAGGTGGGCGGAATTCGTGGTGTA
GCGGTGAAATGCTTAGATATCACGAAGAACTCCGATTGCGAAGGCAGCTCACTAGA
CTGTCACTGACACTGATGCTCGAAAGTGTGGGTATCAAACAGGATTAGATACCCTGG
TAGTCCACACAGTAAACGATGAATACTCGCTGTTTGCGATATACAGTAAGCGGCCAA
GCGAAAGCATTAAGTATTCCACCTGGGGAGTACGCCGGCAACGGTGAAACTCAAAG
GAATTGACGGGGGGCCCGCACAAAGCGGAGGAACATGTGGTTTAATTCGATGATACGC
GAGGAACCTTACCCGGGCTTAAATTGCATTTGAATAATCTGGAAACAGGTTAGCCGC
AAGGCAAATGTGAAGGTGCTGCATGGTTGTCGTCAGCTCGTGCCGTGAGGTGTCGGC
TTAAGTGCCATAACGAGCGCAACCCTTATCTTTAGTTACTAACAGGTTATGCTGAGG
ACTCTAGAGAGACTGCCGTGCTAAGATGTGAGGAAGGTGGGGATGACGTCAAATCA
GCACGGCCCTTACGTCCGGGGCTACACACGTGTTACAATGGGGGGTACAGAAGGCA
GCTACCTGGCGACAGGATGCTAATCCCAAAAACCTCTCTCAGTTCGGATCGAAGTCT
GCAACCCGACTTCGTGAAGCTGGATTTCGCTAGTAATCGCGCATCAGCCATGGCGCG
GTGAATACGTTCCCGGGCCTTGTAACACACCGCCCGTCAAGCCATGAAAGCCGGGGG
TACCTGAAGTACGTAACCGCAAGGAGCGTCCTAGGGTAAAACCTGGTAATTGGGGCT
(SEQ ID NO: 36)

NB2-A13NA *Coprococcus catus*

ATGAGAGTTTGATCCTGGCTCAGGATGAACGCTGGCGGCGTGCTTAACACATGCAA
GTCGAACGGACGATGAAGAGCTTGCTTTTCAGAGTTAGTGGCGGACGGGTGAGTAA
CGCGTGGGTAACCTGCCTCATACAGGGGGATAGCAGCTGGAAACGGCTGATAAAAC
CGCATAAGCGCACAGCATCGCATGATGCAGTGTGAAAAACTCCGGTGGTATGAGAT
GGACCCGCGTCTGATTAGCTGGTTGGTGAGGTAACGGCCCAACGAAGGCGACGATCA

Anexo A

GTAGCCGGCCTGAGAGGGTGACCGGCCACATTGGGACTGAGACACGGCCCAAACCTC
CTACGGGAGGCAGCAGTGGGGAATATTGCACAATGGGGGAAACCCTGATGCAGCGA
CGCCGCGTGAAGGAAGAAGTATCTCGGTATGTAAACTTCTATCAGCAGGGAAGATA
ATGACGGTACCTGACTAAGAAGCCCCGGCTAACTACGTGCCAGCAGCCGCGGTAAT
ACGTAGGGGGCAAGCGTTATCCGGATTTACTGGGTGTAAAGGGAGCGTAGGCGGCG
GAGCAAGTCAGAAGTGAAAGCCCCGGGGCTCAACCCCGGGACGGCTTTTGAAACTGC
CCTGCTTGATTTTCAGGAGAGGTAAGCGGAATTCCTAGTGTAGCGGTGAAATGCGTAG
ATATTAGGAGGAACACCAGTGGCGAAGGCGGCTTACTGGACTGACAATGACGCTGA
GGCTCGAAAGCGTGGGGAGCAAACAGGATTAGATACCCTGGTAGTCCACGCCGTAA
ACGATGAATACTAGGTGTCTGGGGCTCATAAGAGCTTCGGTGCCGCAGCAAACGCAA
TAAGTATTCCACCTGGGGAGTACGTTTCGCAAGAATGAAACTCAAAGGAATTGACGG
GGACCCGCACAAGCGGTGGAGCATGTGGTTTAATTCGAAGCAACGCGAAGAACCTT
ACCAGGCCTTGACATCCCGGTGACCGTCCCGTAATGGGGACCTCTCTTCGGAGCACC
GGTGACAGGTGGTGCATGGTTGTCGTCAGCTCGTGTCTGTGAGATGTTGGGTAAAGTC
CCGCAACGAGCGCAACCCCTATGTTTCAGTAGCCAGCAGGTAAAGCTGGGCACTCTG
GACAGACTGCCGGGGATAACCCGGAGGAAGGCGGGGATGACGTCAAATCATCATGC
CCCTTACGGCCTGGGCTACACACGTGCTACAATGGCGTAAACAAAGGGAAGCGAGA
GGGTGACCTGGAGCGAATCCCAAAAATAACGTCCCAGTTCGGACTGTAGTCTGCAA
CCCGACTACACGAAGCTGGAATCGCTAGTAATCGCGAATCAGCATGTCTCGCGGTGAA
TACGTTCCCGGGTCTTGTACACACCGCCCGTCACACCATGGGAGTTGGAAATGCCCG
AAGTCAGTGACCTAACCGCAAGGGAGGAGCTGCCGAAGGTGGAGCCGATGACTGGG
GTGAAGTCGTAACAAGGTAGCCGTATCGGAAGGTGCGGCTGGATCACCTCCTTTCTA
AGGAA (SEQ ID NO: 37)

NB2-B16TSAB *Bifidobacterium adolescentis*

TGTGGAGGGTTCGATTCTGGCTCAGGATGAACGCTGGCGGCGTGCTTAACACATGCA
AGTCGAACGGGATCCCAGGAGCTTGCTCCTGGGTGAGAGTGGCGAACGGGTGAGTA
ATGCGTGACCGACCTGCCCCATACACCGGAATAGCTCCTGGAAACGGGTGGTAATG
CCGGATGCTCCAGTTGACCGCATGGTCCTCTGGGAAAGCTTTTGCGGTATGGGATGG
GGTCGCGTCCTATCAGCTTGATGGCGGGGTAACGGCCCACCATGGCTTCGACGGGTA
GCCGGCCTGAGAGGGCGACCGGCCACATTGGGACTGAGATACGGCCCAGACTCCTA
CGGGAGGCAGCAGTGGGGAATATTGCACAATGGGCGCAAGCCTGATGCAGCGACGC
CGCGTGCGGGATGACGGCCTTCGGGTGTAAACCGCTTTTGAAGTGGGAGCAAGCCCT
TCGGGGTGAGTGTACCTTTCGAATAAGCACCGGCTAACTACGTGCCAGCAGCCGCG
GTAATACGTAGGGTGCAAGCGTTATCCGGAATTATTGGGCGTAAAGGGCTCGTAGG
CGGTTCTGTCGCGTCCGGTGTGAAAGTCCATCGCTTAACGGTGGATCCGCGCCGGGTA
CGGGCGGGCTTGAGTGCGGTAGGGGAGACTGGAATTCCTGGTGTAAACGGTGGAAATG
TGATAGATATCGGGAAGAACACCAATGGCGAAGGCAGGTCTCTGGGCCGTCACTGAC
GCTGAGGAGCGAAAGCGTGGGGAGCGAACAGGATTAGATACCCTGGTAGTCCACGC
CGTAAACGGTGGATGCTGGATGTGGGGACCATTCCACGGTCTCCGTGTCGGAGCCA
ACGCGTTAAGCATCCCGCCTGGGGAGTACGGCCGCAAGGCTAAAACCTCAAAGAAAT
TGACGGGGGCCCCGACAAAGCGGCGGAGCATGCGGATTAATTCGATGCAACGCGAAG
AACCTTACCTGGGCTTGACATGTTCCCGACAGCCCCAGAGATGGGGCCTCCCTTCGG
GGCGGGTTCACAGGTGGTGCATGGTCGTCGTCAGCTCGTGTCTGTGAGATGTTGGGTT
AAGTCCCGCAACGAGCGCAACCCTCGCCCTGTGTTGCCAGCACGTCGTGGTGGGAA
CTCACGGGGGACCGCCGGGGTCAACTCGGAGGAAGGTGGGGATGACGTCAGATCAT

Anexo A

CATGCCCCCTTACGTCCAGGGCTTCACGCATGCTACAATGGCCGGTACAACGGGATGC
GACACCGCGAGGTGGAGCGGATCCCTTAAAACCGGTCTCAGTTCGGATTGGAGTCT
GCAACCCGACTCCATGAAGGCGGAGTCGCTAGTAATCGCGGATCAGCAACGCCGCG
GTGAATGCGTTCCCGGGCCTTGTACACACCGCCCGTCAAGTCATGAAAGTGGGTAGC
ACCCGAAGCCGGTGGCCCAACCTTTTGGGGGGAGCCGTCTAAGGTGAGACTCGTGA
TTGGGACTAAGTCGTAACAAGGTAGCCGTACCGGAAGGTGCGGCTGGATCACCTCC
TTT (SEQ ID NO: 38)

NB2-B13DCM *Collinsella aerofaciens*

CGGAGAGTTCGATCCTGGCTCAGGATGAACGCTGGCGGGCGCGCCTAACACATGCAA
GTCGAACGGGCACCCACCTCCGGGTGGAAGCGAGTGGCGAACGGCTGAGTAACACGT
GGAGAACCTGCCCCCTCCCCCGGGATAGCCGCCCGAAAGGACGGGTAAATACCGGAT
ACCCCGGGGTGCCGCATGGCACCCCGGCTAAAGCCCCGACGGGAGGGGATGGCTCC
GCGGCCCATCAGGTAGACGGCGGGGTGACGGCCACCGTGCCGACAACGGGTAGCC
GGGTTGAGAGACCGACCGGCCAGATTGGGACTGAGACACGGCCAGACTCCTACGG
GAGGCAGCAGTGGGGAATCTTGCGCAATGGGGGGAACCCTGACGCAGCGACGCCGC
GTGCGGGACGGAGGCCTTCGGGTCTGTAAACCGCTTTCAGCAGGGAAGAGTCAAGAC
TGTACCTGCAGAAGAAGCCCCGGCTAACTACGTGCCAGCAGCCGCGGTAATACGTA
GGGGGCGAGCGTTATCCGGATTCAATTGGGCGTAAAGCGCGCGTAGGGCGGCCCGCA
GGCCGGGGGTCTGAAGCGGGGGGCTCAACCCCCCGAAGCCCCCGGAACCTCCGCGGC
TTGGGTCCGGTAGGGGAGGGTGGAAACACCCGGTGTAGCGGTGGAATGCGCAGATAT
CGGGTGGAAACACCGGTGGCGAAGGCGGCCCTCTGGGCCGAGACCGACGCTGAGGCG
CGAAAGCTGGGGGAGCGAACAGGATTAGATACCCTGGTAGTCCCAGCCGTAAACGA
TGGACGCTAGGTGTGGGGGACGATCCCCCGTGCCGCAGCCAACGCATTAAGCGT
CCCGCCTGGGGAGTACGGCCGCAAGGCTAAACTCAAAGGAATTGACGGGGGCCCG
CACAAGCAGCGGAGCATGTGGCTTAATTCGAAGCAACGCGAAGAACCTTACCAGGG
CTTGACATATGGGTGAAGCGGGGGAGACCCCGTGGCCGAGAGGAGCCCATACAGGT
GGTGCATGGCTGTCGTCAGCTCGTGTCTGTGAGATGTTGGGTAAAGTCCCGCAACGAG
CGCAACCCCCCGCCGCGTGTGTCATCGGGTGATGCCGGGAACCCACGCGGGACCGC
CGCCGTCAAGGCGGAGGAGGGCGGGGACGACGTCAAGTCATCATGCCCCCTTATGCC
CTGGGCTGCACACGTGCTACAATGGCCGGTACAGAGGGATGCCACCCCGCGAGGGG
GAGCGGATCCCGGAAAGCCGGCCCCAGTTCGGATTGGGGGCTGCAACCCGCCCCCA
TGAAGTCGGAGTTGCTAGTAATCGCGGATCAGCATGCCGCGGTGAATGCGTTCCCGG
GCCTTGTACACACCGCCCGTCACACCACCCGAGTCGTCTGCACCCGAAGTCGCCGGC
CCAACCGTCAAGGGGGGAGGCGCCGAAGGTGTGGAGGGTGAGGGGGGTGAAGTCG
TAACAAGGTAGCCGTACCGGAAGGTGCGGCTGGATCACCTCCTTT (SEQ ID NO: 39)

14LG *Acidaminococcus intestini*

GACTTCACCCCAATCATNGGCCCCANTTAGACAGCTGACTCCTAAAAGGTTATCTCA
CCGGCTTCGGGTGTTACCAACTTTCGTGGTGTGACGGGCGGTGTGTACAAGGCCCGG
GAACGTATTCACCGCAGTATGCTGACCTGCGATTACTAGCGATTCCAACCTCACGTA
GGCGGGTTGCAGCCTACGATCCGAAGTGGGGTCGGGTTTCTGGGATTTGCTCCACCT
CGCGGTTTCGCTGCCCTTTGTTGCCGACCATTGTAGTACGTGTGTAGCCCAAGACAT
AAGGGGCATGATGACTTGACGTCATCCCCGCCTTCCTCCAAGTTATCCCTGGCAGTC
TCCTATGAGTCCCCGCCTTTACGCGCTGGTAACATAGGATAGGGGTTGCGCTCGTTG

Anexo A

CGGGACTTAACCCAACATCTCACGACACGAGCTGACGACAGCCATGCACCACTGT
TTTCGTGTCCCCGAAGGGAGGGACCTATCTCTAGGTCTTTCACTCAATGTCAAGCCTT
GGTAAGGTTCTTCGCGTTGCGTCGAATTAAACCACATACTCCACCGCTTGTGCGGGC
CCCCGTCAATTCCTTTGAGTTTCAATCTTGCGATCGTAGTCCCCAGGCGGGATACTTA
TTGCGTTAACTCCGGGCACAGAAGGGGTGATACCTCCTACACCTAGTATCCATCGTT
TACGGCCAGGACTACCGGGGTATCTAATCCCGTTTGCTACCCTGGCTTTCGCATCTC
AGCGTCAGACACAGTCCAGAAAGGCGCCTTCGCCACTGGTGTTCCCTCCCAATATCTA
CGCATTTACACCGCTACACTGGGAATTCCCTTTCTCCTGCACTCAAGACTTCCAG
TATCCAACGCCATACGGGGTTAAGCCCCGCATTTTCACGTCAGACTTAAAAGCCCCG
CTACATGCTCTTTACGCCCAATAATTCCGGACAACGCTTGCCACCTACGTATTACCG
CGGCTGCTGGCACGTAGTTAGCCGTGGCTTCCTCGTTAGGTACCGTCAACACCATGA
CCTGTTCGAACACGGTGCTTTCGTCCCTAACAACAGAGTTTTACAATCCGAAGACCT
TCATCACTCACGCGGCGTTGCTCCGTCAGACTTTCGTCCATTGCGGAAGATTCCCCA
CTGCTGCCTCCCGTAGGAGTTTGGGCCGTGTCTCAGTCCCAATGTGGCCGTTTCATCCT
CTCAGACCGGCTACTGATCATCGCCTTGGTGAGCCGTTACCCACCAACTAGCTAAT
CAGACGCGGGCCCATCTTCCAGCGATAGCTTGCAAGCAGAGGCCATCTTTCCTCCCT
CCTCCATGCGGAGGAGGGAGCACATTCGGTATTAGCATCCCTTTCGGAATGTTGTCC
CCAACTGGAGGGCAGGTTGCCACGCGTTACTCACCCGTTGCGCCACTAAGAATTAC
CGAAATAAGTTCTCCGTTGCACTTGTCATGTGTTAAGCACGCCGCCAGCGTTCGTCCT
GAGCC (SEQ ID NO: 40)