

Sequence Listing Information:

DTD Version: V1_3
 File Name: YK0122.xml
 Software Name: WIPO Sequence
 Software Version: 2.3.0
 Production Date: 2024-03-29

General Information:

Current application / Filing date: 2024-03-29
 Current application / Applicant file reference: YK0122
 Earliest priority application / IP Office: JP
 Earliest priority application / Application number: 2023-058435
 Earliest priority application / Filing date: 2023-03-31
 Applicant name: 株式会社ヤクルト本社
 Applicant name / Language: ja
 Applicant name / Name Latin: KABUSHIKI KAISHA YAKULT HONSHA
 Invention title: 新規ビフィドバクテリウム属細菌 (ja)
 Sequence Total Quantity: 15

Sequences:

Sequence Number (ID): 1
 Length: 2592
 Molecule Type: DNA
 Features Location/Qualifiers:
 - source, 1..2592
 > mol_type, genomic DNA
 > organism, Bifidobacterium pseudocatenulatum

Residues:

gtgaaggagg	tgcgagcgaa	cgggttcggg	ggcagagtag	ctgccgaacc	gaacggccccg	60
atacgcgggc	tacgcaagga	atacaccatt	atcaatgagg	aaagtgatgg	atacacattg	120
ttcaatacaa	ccgatgaacg	tggggcgctc	aagcgccgtg	gcatcgtcgc	ggcgcttgcg	180
gccgtagcca	tgctggtgcc	gctggcattc	gctccgtcgg	ctaccgccgc	ggaaggcgac	240
tactccggtg	gcatcaaggg	cgagtacaac	gctctgggca	tcgccgccgg	tgtggcgacc	300
gaagcctata	gcggtctcaa	tagccaggaa	cggcaggata	cggtgcttgc	caacttcaac	360
cagatcactc	cggaaaaactc	gatgaagccg	gaaggctggt	acgacggcaa	tcatgagttc	420
gccatgtccg	ataacacccg	gagcctgttg	aagttcgcca	gcgacaacaa	catccggatc	480
tacggccacg	ttctggtgtg	gcactcccag	acgcccgact	ggttcttcca	agcggacgaa	540
tggtgtgagg	acgccaataa	caccgccggt	gtcaccagct	gcccgtggc	cgacaaggcc	600
acgatgcagg	agcgtcagcg	tcagcacatc	gagaacgtcg	ccaaggcgat	ctccgatgag	660
ttcgggtccg	tcggcagcga	cacgaatccc	gtcgtggcgt	tcgatgtcgt	caacgaaacc	720
gtgaacgaca	ccgacaatcc	ggacaccaac	ggcatgcgca	attcgctgtg	gtaccagacc	780
tacgacggtg	aggactacat	ctatgacgcg	ttcgagaatg	cgaacacgta	cttcaacgag	840
gtgtacgccg	atccttcgga	cgatcatccg	gtgacgttgt	tcatcaacga	ttacaacacc	900
gagcagtcgg	gtaagcgcac	ccggtatgct	gccctgctgg	accgtatggg	tgccgaaggc	960
gtgccgttcg	acggcatcgg	ccaccagttc	catgtgacgt	tgaccacggc	gacctgaac	

1020

ctggaggccg	cgctgaccga	catggaacgc	ttcaacaaga	agcaggccat	caccgaactg	
------------	------------	------------	------------	------------	------------	--

1080

gacgtgacga	ccggaacccc	ggtcacggag	gccaagctca	tcgaacaggg	ccagtactac	
------------	------------	------------	------------	------------	------------	--

1140

tatgaagtaa	atcagatcat	ccaccgtcac	gctgcgcagc	tgttctccgt	tacggtgtgg	
------------	------------	------------	------------	------------	------------	--

1200

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1260 ggcttgatcg acggactgtc ctggcgtagt ggCGaaggcg ctccgctgct gttcgacgac
1320 aacctggaga agaagccggc gtacatcggc tacatcgggtg atagcgccaa ctttcccag
1380 ccgttgaaga gcatgaacgc attcaaggat gacgccgtgg gcatcgactc ggCGcttccc
1440 ggtaccgtgg ccgagtcagg cgcgtcctct ccgtgggaac gtctttcgct ggtcgagatg
1500 acccgtctg cgaatggcgc cgtttccggc tcgttcaatg tctattggaa ggacggctct
1560 ctggtcgtct acgcggatgt cgccgatgtc agcgcgcgcg atgacgacac cgtcaccgtg
1620 cgtgtgggtg acgccgagta tacgatcggc cgcaacgggtg tgaccggcgcg cgagggtgtg
1680 caggccaacg tcgtttcgtc tgatgccgga tacgaagtcg tggccgatat ccatacacc
1740 ggtgcagaga aggacatcgt cgagatgaac gtcatcgcg cggattccgc caccacggag
1800 accagcgcgt ggagcacgaa cgacaccggc gccgtcacgc tggccgagcc gctgagctac
1860 acggaagccg tgaaggttcc cgccgacgcc caagctccgg tcgttgacgc cgaccgctcg
1920 gatcccgctt gggcggaagc caacgaggtt cccgtggata aggtgaccgc cgccacgcct
1980 tccccgagg cgaccgctac cgccaagacc ctgtggtcgg acggcaagct gtatgtcctc
2040 atggaagtga ccgacgcgga catcgacctg accaactcga atccgtggga gaaggactcc
2100 gtggagggtat acatcgaccg cggcaacacc aagagcggcc agtacaccaa cgacatccag
2160 cagattcgcg tgtccgccga tggcgcgagg ctgagcttcg gctccggcgc gtcggaggat
2220 gtccagaagt ccatggtcca gaccgccggc acgatcgtcg atggcggcta tgtcgtcgag
2280 atggccatcg atctgggaac ggctgaggcc ggcaccttcg aagggtgtcg cttccagatc
2340 aacgacgcga agaacgggtc ccgaatcggc atccgcaact gggccgatcc gaccggcgcc
2400 ggctatcaga cggcgtccca ttggggcggtg ctgcgtctgc tggccgattc ctccgaaacc
2460 gagacccccg gcggcgagga gacccttggg ggggggtaccg acaagcctgg cgacgagaag
2520 ccgcagcctt ccgacgatgc tgacaacgac gacaagatgc cgacagaccg ttccgcggtc
2580 atcggagtcg ccgtgggtggc gttgctgctg gttgccgccg gatgcgggct ggtcatcgct
2592 cggcgtcgat ga

```

Sequence Number (ID): 2

Length: 2100

Molecule Type: DNA

Features Location/Qualifiers:

- source, 1..2100

> mol_type, genomic DNA

> organism, Bifidobacterium pseudocatenulatum

Residues:

	gtggcagacc	ttgatgcgga	ttcgtcgaac	gaatcagctg	aaaacacgca	ggaagatcag	60
	atccagaacg	atcagctcga	agatgcgcag	ctcgatgaca	ccttggtccc	ggagcattac	120
	gacgcttccg	atctgagggg	tctggaaggc	cttgaggcgg	tgcgaatccg	cccgggcatg	180
	tacatcggct	ccaccggccc	ccgaggcttg	caccacctgg	tgtacgagat	cgtcgacaac	240
	tccgtcgaatg	aggcgcctggc	aggctacgct	tcgcacatcg	aagtgcgatg	tctgccggac	300
	ggcggcgctg	gcgtggtgga	tgacggccga	ggcattccgg	tcgacgaagt	gccgggcgaa	360
	ggcgtttccg	gcgtggaaac	cgtgatgacc	aagctgcgatg	ccggcggcaa	gttcggtggc	420
	ggcggctatg	cggtttccgg	cggctcgcac	ggcgtgggca	tctcgtgggt	gaacgcgctg	480
	tcgacccgcg	tcgacatcga	agtgcgccga	cagggcctcc	actggaccca	gacctacatc	540
	gaccagaagc	cgaccgcacg	tcttgccaag	ggcgcagccga	tgggcgaaga	cgagtccacc	600
	ggcacttccg	tgaccttctg	ggcagacggc	gcgatcttcg	aaaccaccac	ctacgatttc	660
	gagaccctgc	gcaaccgctt	ccagcagatg	gcgttcctca	acaaggggct	gaaactgtcc	720
	ctgaccgatt	tgcgcgaacc	ggatcaggcc	ggagacgaag	tcgcgggcga	aagcgacgac	780
	aatgccgaac	cgaagcatca	gacggtcacc	taccaataca	acgacggcat	caaggattat	840
	gtcgattact	tggatgaagtc	ccgcaaggca	acccccgtcg	aaccggacgt	gatcgatttc	900
	gaagcggaag	acctgaaaat	cggcatattcc	gcggaaatcg	ccatgcaatg	gaccaccgca	960
	tactccgaag	cggcgcacac	cttcgccaac	accatctcca	ccaccgaagg	cggtagccac	
1020							
	gaagaaggct	tccgcgccgc	gctgacctcg	ctcgtcaacc	gttacgcacg	tgaaaagaac	
1080							
	atcctcaaag	acaaggatga	gaacctctcc	ggcgacgacg	tgcgcgaagg	cctgaccgca	
1140							
	gtggtgtcgg	tgaaactcac	caccccgcatg	ttcgaaggcc	agaccaagac	caagctcggc	
1200							
	aattccgaag	cgaaaacctt	cgtacagcgt	gtgatgaccg	acaagctcgg	cgactggttc	
1260							
	gattcgcacg	ctagcgaggc	caagaacatc	atccagaagg	ccattgaagc	ctcccgtgacg	
1320							
	cgtcttgcatg	ccaagaaggc	acgtgagaat	acccgccgta	agtcaatctt	cgaatctgacg	
1380							
	ggcatgccag	acaaaactgaa	ggattgccag	tccaacaatc	ctgaagaatg	cgaactgttc	
1440							
	atcgtggagg	gcgactccgc	aggcggctcc	gcaattcagg	gacgcaaccc	gatcacgcag	
1500							
	gccatcctgc	cgttgcgagg	caaaatcctt	aacaccgagc	gtgcaagcct	cgaccgcatg	
1560							
	atgaagtccg	aaaccatcga	atcgtgatc	accgcggtcg	gcggcggcta	tggcgaggat	
1620							
	ttcgacctga	acaaaagtccg	ctaccacaag	gtcatcatca	tggccgatgc	cgatgtggac	
1680							
	ggcgcgcata	tcgcaaccct	gaatctgacg	ctgttcttcc	gctacatgacg	cccgatgatc	
1740							
	accgctgggtt	acgtgtatgt	ggccatgccg	ccgctgtacc	gactcaagtg	gaccaaaggc	

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1800      gcgcacgact  tcgtgtacac  cgacgccgaa  cgcgaccgcg  tgctcgccga  aggcaagtcc
1860      gccggccgctc  agctgccgaa  gggcgaaggc  atccagcggtt  acaaggggtct  gggtgaaatg
1920      agctaccagg  aactgtggga  aaccaccatg  gatcctgacc  accgcattct  gaagcagggtg
1980      cagatcgaag  acgcggccgc  agccgacgaa  accttctcca  tgctcatggg  agacgaagtc
2040      gaacctcgcc  gtctgttcat  ccagcgcaac  gcccgcgaac  tcagctggat  cgacgcgtag
2100

```

Sequence Number (ID): 3

Length: 831

Molecule Type: DNA

Features Location/Qualifiers:

- source, 1..831
 - > mol_type, genomic DNA
 - > organism, Bifidobacterium pseudocatenulatum

Residues:

```

atggctatcc  gcgtttataa  gccgacgact  gcaggccgcc  gtaacgcgtc  cgtctcggac  60
ttctccgagc  ttacgcgttc  tacgcctgag  aagtcgctgg  ttcgcaaact  cagcaagact  120
ggcggtcgta  actcttacgg  ccgtatgacc  tcccgtcatc  gtggcggcgg  tcacaagcgc  180
cagtaccgtc  tcatcgactt  caagcggttg  gacaaggacg  gcgtgccggc  aacggtcgct  240
cacatcgagt  acgacccgaa  ccgttccgcc  cgcatcgcac  tgctgacta  cgagaccggc  300
gagaagcgct  acatcatcgc  tccggaaggc  atcaagcagg  gtgacgtcat  cgagaccggc  360
gcccaggctg  atatcaagcc  gggcaacaac  ctgccgctgc  gcaacatccc  gactgggtacc  420
gtgggtgcacg  caatcgagct  ccgcccgtg  ggtggcgcca  agatcgcccg  ctccgctggc  480
gcagccgtgc  agctcgtcgc  taaggatggc  gcttacgcc  agctgcgtat  gccgtccgga  540
gaaatccgca  acgtggatgc  tcgtgccgc  gcaaccgtcg  gtgaggtcgg  caactccgat  600
cacgccaaca  tccagctcgg  taaggcaggc  cgtgcacgtt  ggatgggcaa  gcgcccgatc  660
acccgtgggtg  aatccatgaa  ccctgtcgat  caccgcacg  gcggtcgtac  ccgcggtggc  720
aagccgccgg  tttctccgtg  gggcaagggc  gaggttcgta  cccgccgtcc  gaagaaggct  780
tcgaacaaga  tgattgttcg  tcgtcgcccc  aatggtaaga  accgtaagta  a  831

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Sequence Number (ID): 4

Length: 1515

Molecule Type: DNA

Features Location/Qualifiers:

- source, 1..1515
 - > mol_type, genomic DNA
 - > organism, Bifidobacterium pseudocatenulatum

Residues:

```

ttgtcagctg  aactcgaaga  catccacgag  gaatcggtga  tttttggcgt  ttggggtcac  60
ccggacgccg  cccgactcac  ctacttcggc  ctgcacgcgc  tgcagcatcg  ttgtcaggaa  120
ggcgccggca  ttgtctcgaa  cgataacggc  catctcatcg  gtcacgcgg  aacgggtctg  180
ttgacccaag  tggtcggcga  cgaacgcgaa  atcgaacgcc  tgaagggaga  caaggcgatc  240
ggccatgtgc  gttacgccac  tgccggttca  ggccggcaccg  acaacatcca  gccattcatc  300
ttccgcttcc  atgacggcga  tatggccttg  tgtcacaatg  gcaatctgac  gaactgcccg  360
actctgaggc  gtcagttgga  agacgaaggc  gcaatcttcc  actccaattc  cgacaccgaa  420

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	gtgttgatgc	acctgttgcg	ccgctccaca	cagcgtacgt	tcatggacaa	gctcaaggaa	480
	gcgctcaaca	ccgtgcatgg	cggtttcgcc	tacctgatca	tgaccgaaga	cgccatgatc	540
	ggcgcgcttg	atccgaacgg	tttccgcccc	ctttccctcg	gcaagatgaa	aaacggcgct	600
	tatgtgctcg	cttccgaaac	ctgcgcgctt	gacgttgctg	gcgccgaatt	ggtgcgcaat	660
	attcgcccgg	gcgaaatcgt	ggttatcgac	gacacaggct	acaagatcgt	gcagtacacc	720
	aatcagaccc	agttggccat	ctgctcgatg	gaattcatct	acttcgcacg	ccccgattcc	780
	gacatttacg	gcgtaaacgt	gcattccgcc	cgcaagcgta	tgggtgcgcg	tctggcccaa	840
	gaatcgccgg	tcgatgccga	tatggtcatt	ggcgtgccga	attcctcgct	gtccgcggcc	900
	tccggctatg	cggagaagc	tggctcgcca	aacgagatgg	gcctgatcaa	gaaccagtat	960
	gtggctcgaa	ccttcatcca	gccgacgcag	gaactgcgcg	agcagggcgt	gcgcatgaag	
1020							
	ctgtccgccc	tgcgcgggcg	ggtcaaaggc	aagcgcgtga	tcgttatcga	cgattccatc	
1080							
	gtgcgcggta	ccacgtccaa	gcgcatcgtg	cagctgctga	aggaagctgg	cgccgccgaa	
1140							
	gtgcacatgc	gtatcagctc	gccgccgctg	aagtaccctg	gcttctacgg	catcgacatc	
1200							
	tccaccacca	aggagctcat	cgccgcaaag	aagtcctgtg	aagaaattcg	cgatttcatt	
1260							
	ggcgccgatt	ccttggcggt	cctgtcactc	gacggattgg	tcgaatctat	cggcctgggt	
1320							
	gcggacgccc	cgtacggcgg	tctgtgcgtg	gcctacttca	atggcgacta	cccgaccgca	
1380							
	ctcgacgatt	atgaaagtga	ttttttgaag	tccctcacc	cagaagatcg	cgtgcgtctg	
1440							
	cctgaattcg	ccttgtataa	gagcaagtac	gagggcaacg	aatacaccac	tacttcatcc	
1500							
	caagaagaac	actga					
1515							

Sequence Number (ID): 5

Length: 3561

Molecule Type: DNA

Features Location/Qualifiers:

- source, 1..3561

> mol_type, genomic DNA

> organism, Bifidobacterium pseudocatenulatum

Residues:

ttggctgagg	ctacgacgaa	caccaccacc	atcatcgcac	gcgccgacca	gcacgatatt	60
gatctgcaca	aggcgtcgga	ccgtgtgaac	ttcggctcca	tccgcgagcc	cattgatgta	120
ccctacctgt	tgggtgtaca	gactgacagc	ttcgactggc	tcatcggcaa	cgagcgctgg	180
cagaagcgtg	tcgaggagga	tctggcgaac	ggcaccaaca	ccgtgcccc	cacctccggt	240
cttgatgagg	tcttcagga	gatctcaccg	atcgagaact	tcgctcagac	catgagcctg	300
accttctccg	atccgtat	cgaagaaccg	cgccacaccg	tgaggagtg	caaggagaag	360
gattacacct	actccgcgcc	gctgtatgtg	aacgctgaat	tcgaaaacgg	cgacaccggc	420
gaaatcaagt	cccagaccgt	gttcatgggc	gatttcccg	tgagacccc	gcacggcacc	480
ttcatcatcg	gtgggtaccga	gcgagtgatc	gtgtctcagc	tgggtgcgttc	tccgggcgtg	540
tacttcgacc	gcagccagga	tcgcacttcc	gacaaggaag	tcttcggcgc	gaagatcatc	600
ccgagccgtg	gcgcatggct	tgagttcgag	atcgacaagc	gtgacgtgct	tggcgtgcgc	660
gtggaccgca	agcgcaagca	gtccgccatc	gtgttcctca	tggccatcgg	catgaccaag	720

	gatgagatcg	ccgatgcgtt	cagggattac	ccgctgggta	tggacgcgct	tgccaaggag	780
	accgtgcaga	cccaggacga	ggctctgacc	gatctgtacc	gcaagatccg	cccggccgac	840
	accccgacgc	cggaaagctgg	ccgcaacctg	ctggattcct	tctacttcaa	caccaagcgt	900
	tacgatctgg	cccgcgttgg	ccgttacaag	atcaaccgca	agcttggtct	ggaaaaggat	960
	gtcaacgatc	gcagcctgtc	tcgcgaagac	atcatctcca	ccatcaagta	cctggtcacc	
1020							
	ctgcatgccg	gcgacaccaa	gttcccgggc	aagcgtgacg	gccaggatgt	ggatctgcgc	
1080							
	gtggacgtcg	acgatatcga	tcatttcggc	aaccgtcgta	tccgccagggt	cggcgaactg	
1140							
	atccagaacc	agctgcgtac	cggctctgagc	cgtatggagc	gtgtgggtccg	cgaacgtatg	
1200							
	accacccagg	atccggaggc	catcacccccg	cagtccctga	tcaacattcg	tccggtgaac	
1260							
	gccaccatca	aggagtctct	cggaaacttcc	cagctgtcgc	agttcatgga	tcagaacaac	
1320							
	ccgttggcag	gcgtcaccaa	caagcgtcgt	ctgtccgctc	tgggccctgg	cggctctgtct	
1380							
	cgtgaccgcg	catccatgga	agtgcgagac	gtgcacccgt	cccacttcgg	ccgtatgtgc	
1440							
	ccgatcgaat	ctcctgaagg	tccgaacatc	ggctcttatcg	gttctctggc	aaccttcggc	
1500							
	cgcacatca	cgttcggctt	catcgagacc	ccgtaccgta	aggtcatcaa	cggccatgtg	
1560							
	accgacgagg	tcgaatacat	gaccgcagac	cgcgatgccg	agcacgtgat	cgcacaggcc	
1620							
	aaccagggaac	tcgacgagaa	cggcaacttc	gtcaagaagc	aggctcttgc	ccgagtcggc	
1680							
	gaagaagaag	cagtcgatgt	gcccgtcagc	tccgttgact	acatggacgt	ttccccgcgt	
1740							
	cagatggttt	ccgtcggcgc	ctcccctgatt	ccgttcctgg	agcacgatga	gggccaccga	
1800							
	gcgctgatgg	gtaccaacat	gcagcgtcag	gcagtgccgc	tgatcgaatc	cgagcgccccg	
1860							
	ctgggtgggca	ccggtgccga	atggcgtgcg	gccgtcgatt	ccggcgatgt	cattctggct	
1920							
	gagaagccgg	gtgtggtgac	gtatgtttcc	gccgacatca	tccgtgtgat	gaacgacgac	
1980							
	ggcaccacca	gctcctacaa	gctggccaag	ttcctgcgtt	ccaaccagac	cacctgctac	
2040							
	aaccaggttc	cgctgatcca	cgacggcgaa	cgtgtggaag	ccggtaccgt	gcttgccgat	
2100							
	gggtccggcca	cccagaaggg	cgaaatggca	ctgggcaaga	acctgctcat	cgccttcatg	
2160							
	ccgtggaacg	gctacaacta	cgaggatgct	gtgatcatct	cccagcgtct	cgtgcaggac	
2220							
	gacaccctga	gctccatcca	catcgaggaa	tatgagatcg	acgcccgcga	aaccaagctg	
2280							
	ggtgccgaag	agatcacccg	cgatctgccg	aacgtcggcg	aggacgcggg	ggccaacctc	
2340							

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2400   gacgagcgtg  gcatcattcg  catcgggtgcc  gaggtcgaag  ccggcgacat  tctggtgggc
2460   aagggtcaccc  cgaagggcgga  gaccgagctg  actccggaag  agcgtctgct  ccgcgccatc
2520   ttcggcgaga  agagccgcga  ggtgcgtgac  acctcgctgc  gcgtgcctca  cggcgaaacc
2580   ggtacgggtga  tcgccgtcaa  ggagatcact  cgcgaggatg  ccgaggaaga  cggcgacgag
2640   ctgccgaacg  gcgtgaacca  gatgatccgc  gtctacatcg  cgcagcatcg  taagatcacc
2700   cagggagaca  agctgtccgg  ccgccacggc  aacaagggtg  ttatctcccg  cattctgccg
2760   gaagaggata  tgccgttcct  tgccgacggc  actccggtcg  acatcatgct  gaacccgctg
2820   ggcgtgcctt  ctcgaatgaa  ccttggccag  gtgctggaac  tgcacttggg  ctggatcgcg
2880   cacgccggct  gggacatctc  cttgatccg  gatgccgaag  ccgcttggaa  gaagtacatt
2940   ccgcagggcg  ccgaaaaggg  cgagccgggc  actccggtgg  caaccccggc  gttcgacggc
3000   gttcgtccgg  aaaccatcaa  gggcctgctg  tcctgcaccc  ttccggatcg  cgacggcaac
3060   aagctggtcg  gcgacgacgg  caaggctgtg  ctgttcgacg  gccgtaccgg  cgaaccgtat
3120   ccgaagccga  tctccgttgg  ctacatgtac  atgctgaagc  tgcaccacct  agtcgacgac
3180   aagatccacg  cgcgttccac  tggcccgtac  tccatgatca  cccagcagcc  gttgggcggc
3240   aaggctcagt  tcggtggcca  gcgtttcggc  gagatggaag  tgtgggccct  cgaggcctat
3300   ggcgccgcct  acacgctgca  tgaaatgatg  accaccaagt  ccgatgacgt  cgacggccgc
3360   gtgcgtgtct  acggcgccat  cgtgaagggc  gacaacctgc  cgccggcagg  cattccggaa
3420   tccttcaagg  tgctgcttaa  ggaaatgcag  tccctgtcgc  tgaacgtcga  agtgctcaac
3480   gccgaaggcg  tggccatcga  catgaaggac  gaggacgacg  atccgtctac  ttcctccgac
3540   gatttgggct  tcaacattgg  cgcacgtcct  gacgcggccg  ccaaggaaga  ccaggttgtg
3561   gaagaacctg  aattccagtg  a

```

Sequence Number (ID): 6

Length: 2586

Molecule Type: DNA

Features Location/Qualifiers:

- source, 1..2586
 - > mol_type, genomic DNA
 - > organism, Bifidobacterium pseudocatenulatum

Residues:

atgttcgaac	ggttttaccga	ccgtgcgcg	cgctgatcg	tgctggcgca	ggaagaggct	60
cgtaccctcc	agcacaacta	catcgggtacc	gagcatctgc	tgcttggcct	gattcgtgag	120
ggtgacggcg	tcgcagccaa	ggcgtggcc	tcaaagggtg	tgaccttgga	tgacacccgc	180
aaacaggtcg	aagagatgat	cggtaagggg	aatgccacgc	cgaacggcca	cattcccttc	240
accccgcatg	ccaggcaggt	gttggagctg	tcgctgcgtg	aggcgttgca	gctggggcac	300
agctatatcg	gcaccgagca	tatcctgctc	ggtctgattc	atgaaggcga	aggcgtcggc	360
accaggtgc	tgatcaagat	ggacgtcaat	cttggcgagc	tgcgacgcgc	caccatcgac	420
ctgatccgtg	gcaattccgg	tgatggcaag	ggcgatggca	agggcgattt	ggccaatgcc	480
ggtggcgctg	aggatcgctg	caaccagacc	ggttccgcga	ttcttgacca	gttcggccgc	540
aatctgaccg	ctgaagctgc	cgccggcaag	cttgatccgg	tgattgggcg	ttcgagttag	600
atcgagcgtg	tgatggtggt	gctgagccgc	cgtaccaaga	acaatccggt	gctgatcggc	660
gagccgggtg	tcggcaagac	ggccgtggtc	gaaggcttgg	cgcagaagat	caatgccggc	720
gacgttccgg	agacgctgaa	gggcaagcag	gtctattcgt	tggatctggg	atccatggtg	780
gctggttcgc	ggtatcgtgg	cgatttcgag	gagcgtctga	agaagggtgct	caaggagatc	840
aagacccgcg	gcgacatcgt	gctgttcatc	gatgagatcc	ataccattgt	gggcgctggt	900
tccgcggatg	gcgctcttgg	cgcttccgac	atgttgaaagc	caatgctcgc	gcgaggtgag	960
ctgcagacca	ttggcgccac	caccaccgac	gagtaccgta	agtacatcga	gaaggatgcc	

1020

gcttttgaac	gtcgtttcca	gcccattccag	gtgcatgagc	cgagcattgc	cgaaaccatc	
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1080

gagatcctta	agggcttgcg	ttcgcgttac	gagaaccatc	accatgtgac	gatcaccgat	
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1140

ggtgcgttgc	aggccgcggc	cgatctgtcg	agccgttaca	ttcaggaccg	tcattctgcca	
------------	------------	------------	------------	------------	-------------	--

1200

gacaaggcca	tcgatctgat	cgatgaggcc	ggtgcgcgctc	tgcgcatccg	tcgtctgacc	
------------	------------	------------	-------------	------------	------------	--

1260

gctccgccgg	agcttaagga	acttgacacg	aagatcgcca	agcttgccga	agagaaggac	
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1320

caggccatca	agggccagga	cttcgaaaag	gccgctgagc	tgcttgataa	gcaggagaag	
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1380

ctggaagccg	aacgcaagca	gaaggaaatct	tcgtggcgctg	agggcgaatc	cgatgtgaag	
------------	------------	-------------	-------------	------------	------------	--

1440

atggttgtgg	atgaggatgt	catcgccgaa	gtgatttccc	agaccaccgg	cattccgggtg	
------------	------------	------------	------------	------------	-------------	--

1500

ttcaagctca	cccaggccga	gtccaagaag	ctcatgacca	tggaaagcga	gctgcacaag	
------------	------------	------------	------------	------------	------------	--

1560

cgcatcatcg	gccaggacga	ggccgtgtcc	gcgttgagcc	gctccatccg	tcgtgctcgt	
------------	------------	------------	------------	------------	------------	--

1620

gttggtttga	aggatccgaa	gcgtccgtcc	ggttcgttta	tcttcgctgg	ccccaccggc	
------------	------------	------------	------------	------------	------------	--

1680

gtcggtaaga	ccgagctggc	caagacgctc	gccgaattcc	tgtttgacga	cgaggacgca	
------------	------------	------------	------------	------------	------------	--

1740

ctgattcgtg	tcgacatgtc	tgaattctcc	gagaaatatg	cggcttcgcg	cctatttgggt	
------------	------------	------------	------------	------------	-------------	--

1800

gctcctccgg	gatacgtcgg	ttacgaagag	ggcggcgaac	tcaccgagaa	ggttcgtcgc	
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1860

aagccgttct	ccgtgggtgct	gttcgatgag	atcgaaaagg	cccatccgga	tatcttcaac	
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1920

acgctgctgc	aggtgcttga	tgacgggtcat	ctgactgatg	gccagggccg	caaggtggac	
------------	------------	-------------	------------	------------	------------	--

```

1980      ttcaagaaca  ccatcatcat  tctgaccacc  aatcttggtg  cgcgagacat  cgccaaggcc
2040      gccaacaccg  gcttcaactt  gggtgccaac  accgagtcga  gctaccagcg  catgaaggat
2100      caggtttccg  cggagctgaa  gcagcagttc  cgtccggaat  tcctgaaccg  tctggacgac
2160      atcatcgtgt  tcaagcagct  caccgagccg  caagtgcgtc  agatcgtcga  tcttgacgtc
2220      aagcagctca  atgatcgctt  gttcgatcgc  cacatgtccc  tcgagcttac  cgacgctgcc
2280      aaggatctgc  tcgcgcgagaa  gggcttcgac  ccgctgctgg  gcgcgcgtcc  gttgcgtcgc
2340      gtgattcagc  gcgacgtcga  agacgccatt  tcggagaaga  tcctgatggg  cgaactcgaa
2400      gatggccagc  gcgtgaaggt  cgatgcggaa  ggcgaaggca  tcctgggcga  gttcaccttt
2460      accggtgagg  cgttcgaaga  gccaaatacg  gagcctgctg  aaggtgaagt  cgcagctgaa
2520      accgaggcac  ctgccgaatc  gacggaatcg  acagaactta  cggaatccgc  agaatctgtt
2580      gaataa
2586

```

Sequence Number (ID): 7

Length: 2130

Molecule Type: DNA

Features Location/Qualifiers:

- source, 1..2130

> mol_type, genomic DNA

> organism, Bifidobacterium pseudocatenulatum

Residues:

```

atggcactag  acgtgctcaa  tgatctcaac  cagatccgta  acatcggcat  catggctcac  60
atcgatgccg  gtaagaccac  taccaccgaa  cgtatcctgt  actacaccgg  caagaactac  120
aagatcggcg  agacccatga  cggtgccctg  acgatggact  tcatggctca  ggagcaggaa  180
cgcggcatca  ccatccagtc  cgctgcaacc  acttgcttct  ggaaccgtca  gacccatgac  240
gagaagcaga  agttccagat  caacatcatc  gataccccag  gccacgtgga  cttcacggcc  300
gaggtggagc  gctccctgcg  cgtgctcgat  ggtgccgttg  ccgtgttcga  cggcaaggaa  360
ggtgtggagc  cgcagtccga  gaccgtgtgg  cgtcaggctg  acaagtacgg  cgttccgcgt  420
atctgcttca  tcaacaagat  ggataagctc  ggcgctgact  tctactactc  cgtcgacacc  480
atcaaaaacca  agctggggcgc  gaccccgctt  gtcgtgcagc  tgccgatcgg  cgctgagaac  540
gacttcgctg  gcgttgctga  tctgattcgt  atgaaggctt  acgtctggaa  cgacgtttcc  600
ggcgacatgg  gcgctcacta  cgacactacc  gacatccccg  ccgacctgca  ggacaaggcc  660
gagcagtatc  gtgcagagct  gctcgaccag  gtcgcagaat  ccgacgaaga  gctgcttgag  720
aagtatctcg  agtccggcga  actgactgag  gacgagatcc  gtagcggcat  ccgtaagctc  780
accattaacc  gtgaagccta  cccggtgctc  tgcggctccg  ctttaaggga  caagggtgtt  840
cagccgatgc  tggacgccgt  cgctcgactac  ctgccgagcc  cggaggacgt  tccgtccatc  900
gtcggtttcg  atcctaagga  cgaatccatc  gagatcgatc  gcaagccgac  caccgatgat  960
ccgttctctg  ccctggtctt  caagatctct  acccaccggt  tctacggcaa  gctcgtgttc

```

1020

```

1080  gtgcgcgtct  actccggcgc  cgtcaccccg  ggcgacaccg  tgcttgactc  caccaagggc
1140  aagaaggaac  gcgtcggcaa  gatcttccag  atgcacgccg  acaaggagaa  cccggtcgat
1200  gccgccgaag  ccggcaacat  ctacaccttc  gtgggcctga  agaacatcac  caccgggtgac
1260  accctgtgcg  acgaaaaggc  gcctatctcc  ctcgaatcca  tgaccttccc  ggatccgggtg
1320  atcgagggtg  ccgtggagcc  gaagaccaag  gccgatcagg  agaagatgag  catcgctctg
1380  gcgaagctgt  ccgacgaaga  tccgaccttc  cagggtgaaga  ccgacgaaga  gtccggccag
1440  accctgatct  ccggcatggg  cgagctgcag  ctcgacatca  tcgtcgaccg  tatgcgtcgt
1500  gaattcaagg  tggagtgcaa  cgtgggtaac  ccgcaggttg  cataccgtga  gacgatccgc
1560  aaggccgtca  tgaaccagga  atacacgcac  aagaagcaga  ccggtggttc  cggccagttc
1620  gcaaaggctc  tgatgaactt  cgagccgctc  aacaccgaag  agggcgagac  ctacgagttc
1680  gtcaacgagg  tcaccgggtg  ccacatcacc  aaggaattca  ttccttccat  cgatgctggt
1740  gtgcaggaag  ccatggaatc  cggcgtgctc  gccggcttcc  cggtggttgg  cgtcaaggct
1800  accgtcactg  acggccagggt  ccacgacgtc  gattcctccg  aaatggcctt  caagatcgca
1860  ggttccatgt  gcttcaagga  agctgctccg  aaggccaagc  cggtcacctt  cgagccgatc
1920  atggccgtgg  aagtgcgtac  tccggaagag  tacatgggcg  acgtgatggg  cgatatcaac
1980  gcccgtcgtg  gttccatcca  gtccatgacc  gactccaccg  gtgtcaagggt  catcgatgcc
2040  aaggttccgc  tgtccgaaat  gttcggctac  atcggcgacc  ttcgctccaa  gacccagggc
2100  cgcgcaatgt  tcaccatgca  gatggactcc  tacgctgagg  ttccgaagaa  cgtctccgag
2130  gagatcatca  aggcccagcg  cggcgagtga

```

Sequence Number (ID): 8

Length: 3312

Molecule Type: DNA

Features Location/Qualifiers:

- source, 1..3312

> mol_type, genomic DNA

> organism, Bifidobacterium pseudocatenulatum

Residues:

gtgagcgaaa	acaacgtgta	tccgaaggca	gctgcgggtg	agcagagcgc	caatgtagcg	60
ccgaacccca	gtttcccgaa	gctggaagaa	tccgtccttg	attattggga	gaaggacgac	120
actttccaga	agtccattga	acgccgtcct	tccggcgatc	acagccagaa	cgaattcgtc	180

	ttcttcgacg	gaccgccgtt	cgccaacggc	ctgccgcact	acggccacct	gctgaccggc	240
	tacgccaagg	atgtgattcc	gcgctaccag	accatgaagg	gccacaaggt	caatcgtgtg	300
	ttcggctggg	atacgcacgg	tctgccggcc	gagcttgaag	cccagaagga	actgggcatc	360
	gactcggtcg	atcagggtcaa	ggaaatgggc	atcgacaagt	tcaacgacgc	ttgccgcgcc	420
	tccgtgctca	agtacaccaa	cgagtgggaag	gactacgtgc	accgtcaggc	acgttgggtc	480
	gatttcgagc	atggctacaa	gacgctgaac	attccataca	tggaatccgt	gatgtgggcg	540
	ttcaagcagc	tgtacgacaa	gggcctcgca	tatcagggct	accgctgtgt	gccgtactgt	600
	ccgaaggatc	agacgccgct	ttccgcgcac	gagctgcgca	tggacgccga	cgtgtatcag	660
	gatcgtcagg	acaccaccgt	gtccgtggcc	gtgaagctgc	gcgacgagga	agacgcctat	720
	gcggtgttct	ggaccaccac	gccgtggacc	gttcccacca	acttcgccat	cgtggtcggc	780
	gcagacatcg	actatgtgga	agtgcgtccg	accgaaggca	agttcgcggg	caagaagttc	840
	tacctgggca	agccactgct	cggctcctac	gccaaaggaac	ttggcgacaa	ctatgagatc	900
	gtgcgcgaac	tcaaggggtg	cgagatggaa	ggctggcgct	actaccgggt	gttcccgtac	960
	ttcgcaggcg	acgagaacgc	cgtcgaaggc	aaggttccgg	gtccggaagg	ctatcagatc	
1020							
	ttcaccgccg	actatgtcga	taccgttgag	ggtaccggtc	tcgtgcacca	ggctccgtac	
1080							
	ggcgaggacg	atatgaacac	gctcaacgcc	aagggcatca	agagcgttga	cgtgctcgac	
1140							
	gcgggctgca	agttcaccgc	gctgtgcccc	gactacgagg	gcatgtacgt	gttcgatgcg	
1200							
	aacaagccga	ttctgcgtaa	cctgcgtgcc	ggtgacggtc	ctctggagcg	tattccggaa	
1260							
	gatcagcgcg	cgatcctttt	ccaggagaag	agctacgtgc	actcctaccc	gcactgctgg	
1320							
	cgttgcgcca	cgccgctcat	ctacaagccg	gtgagctcgt	ggttcgtgtc	cgtcaccaag	
1380							
	atcaaggatc	gtctgctcga	actgaaccag	gaaatcaact	ggattccggg	caatgtgaag	
1440							
	gacggccagt	tcggcaagtg	gctggccaac	gcccgtgact	ggtcgatctc	ccgcaaccgt	
1500							
	ttctgggggtt	cgccgattcc	ggtgtgggtt	tccgatgata	cgaagtatcc	acgcgttgac	
1560							
	gtgtacgggtt	cgttggacga	gctgaaggct	gattttggcg	attatccgcg	cgaccatgag	
1620							
	ggcaatgtca	acatgcaccg	cccgtacatc	gacgagctga	cccgcgtcaa	cccggacgat	
1680							
	ccgaccggca	agagccacat	gcaccgcatc	accgacgtga	tggactgctg	gttcgaatcc	
1740							
	ggttccatga	gcttcgcccc	gtaccattac	ccgttcgaaa	acaaggaaac	gttcgaacag	
1800							
	catttcccgt	gcgattacat	cgtggaatac	atcggccaga	cccgtggctg	gttctacgtg	
1860							
	cagcacatca	tggcgaccgc	actgttcgac	aagccggcgt	tcaagaacgt	gatctgccat	
1920							
	ggcatcgtgc	ttggctccga	cggccagaag	atgtcgaagc	atctgcgcaa	ctacccggat	
1980							
	gtgaatggag	tggtcaacga	tttcggctcc	gacgccatgc	gctggttcct	catgagctcg	
2040							
	ccgatcctgc	gcggcggcaa	cctgatcgtg	accgccgatg	gcattcgcga	caccgtgcgt	

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2100      caggatcatgc  tgccagtgtg  gagttcgtac  tacttcttca  ccctgtatgc  gaacgccgcc
2160      aataatggcg  ccggcttcga  tgctcgtaca  ttgcgtgccg  atgaggatcgc  cgacttgccg
2220      gaaatggatc  gttacctgct  ggcgcggtacc  cgccgactga  tcgagaagac  gcaaagctcg
2280      ctggacaact  tcctgatctc  tgacgcatgc  gaagccgtgt  ccgatttcat  tgacatgctc
2340      accaactggg  atatccgcaa  caatcgtgac  cgtttctgga  atgaggatgc  gaacgcgttc
2400      aacacgctgt  acaccgtgct  tgaagcattc  atgcgcgtga  tcgcaccgct  tgctccgatg
2460      gaagcggaag  cagtgtggcg  tggctctgacc  ggtggcgaat  ccgtgcactt  ggccgactgg
2520      ccgttccttg  ccgacgagca  gaccggagag  gcaacagaac  tgggccgcgt  gcttgttgac
2580      gatccggctc  tggttgatgc  gatggagaag  gtgcgcgagg  tcgtgtccgg  cactctgtct
2640      atgcgtaaga  caaagcagat  ccgtgtgcgc  cagccgctgt  ccaagctgac  cgtggtggtg
2700      gagaacactg  ccgccgtggc  cgcatacgac  gagattctga  aatccgaact  gaacgtgaag
2760      aacgttgaat  tgtgcacgct  tgaagatgcc  gaagcccaag  gcttgaagat  catcaacgag
2820      ctgcgtgtga  acgctcgcgt  ggaggcaag  cgcctgcgca  aggacgtgca  gttcgccatc
2880      aaggcttcca  agtccggcgc  atggcatgtg  aacgccgaag  gcgctccggt  atgtgagact
2940      ccgaacggtg  agatcgtgct  tgaggaaggc  gaatatgagc  tgatcaacag  cgtggaggag
3000      aagaacgccg  aagaggccgc  caactctgta  agtgctgcac  tgccgaccgg  tggcttcgtg
3060      atcctcgaca  ccgagctgaa  cgacgatctg  atcgcagaag  gctatgcccg  cgacgtgatc
3120      cgcgccgtgc  aggacgcccg  caaggccgcc  gatctgcaga  tctccgaccg  tatcgactg
3180      aagctcgttg  tgcccgccga  agacgtggcc  aaggtcgaac  agttcaagga  acttgtctcc
3240      tccgagacgc  tcgccacttc  cttcgaagtg  actgccggcg  atgagctgaa  cgttgagggt
3300      gccaaaggcct  ga
3312

```

Sequence Number (ID): 9

Length: 2091

Molecule Type: DNA

Features Location/Qualifiers:

- source, 1..2091

> mol_type, genomic DNA

> organism, Bifidobacterium pseudocatenulatum

Residues:

atggctgact	cactcgcac	gcagatcatc	actgcaatcg	gtggctcctga	aaacgttcgc	60
agtctgacgc	attgcgccac	tcgactgcgc	tttgaactgg	ttgacgcac	caaggtcgat	120
cagaatagtc	tcgagcacat	gcagggcgctg	ctcggcgcg	tgccgcagag	cggcgaccgc	180
ttccaggtgg	tcatcggcgg	tggcggttgcc	accgtgtacg	aaaacatcat	gcatctgccc	240
gaaatggccg	gtgtcggcgg	tgcttccgca	tccgacgatg	gtcagaagag	caatgccgac	300
gtcaaggccg	aagcccgttc	caaggcccg	ggcaagggtg	cttggctgga	ctccttcttc	360
gagtatctct	ccgattcctt	ccgcccgaatt	ctgggcgtgc	tgctcggcgc	ttccatcatc	420
atcgcgctgg	tcaacctgct	tatttcgctg	aacgtcattc	cgaatgacga	ggtttccgca	480
ggctgggtat	tcgtgaaagc	catctggaag	ggcgtattct	acttcctgcc	gatcatgggtc	540
gcctacaacg	cgtccaagaa	gctcaaagtc	gacccatggc	tgggtgggtg	catcatggcc	600
atgctcatga	ccccgcagtt	caccggcttg	atggacgcca	agaccaccac	gtgcgtggag	660
aacgccgctc	tgggcaccaa	gtcttgcatg	gccaacatat	tcggtctgcc	gatggcattg	720
agcgactatt	ccggcaacgt	gttcgtgccg	ctgctcatgg	ccgccgtgct	tgctctcgtc	780
taccacggat	tgaagaggat	catcccggaa	agcgtccagc	tggctttcgt	gccgttcttc	840
tgcatgatca	tcgttggcgc	gctgaccgcc	ttcatcatcg	gcccgatcgg	cgtgtgggtc	900
ggcaacggcc	tcggcgctcg	cttggcctgg	atgaacaccc	atgccccgtt	catcttcgcc	960
atcatcattc	cgatgctgta	cccgttcctc	gtgccgctcg	gtttgcactg	gccgctcaac	

1020

gccctgatgc	tcatgaacat	ccagactctc	ggctacgact	tcatccaagg	cccgatgggc	
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1080

gtgtggaact	tcgcctgctt	cggcgctacc	gctggcgtgc	tcttccttgc	tgtgcgtgac	
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1140

aaggataagg	acatgcgcca	gaccgctttg	ggcgcaactg	cggccggcct	gctcgggtggc	
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1200

gtttccgaac	cgtctctgta	cggcattcac	ctgcgttaca	agctcatcta	caagcgcgatg	
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1260

ctgggtgggct	gcggctctcg	tggcgctcgtc	atcgccatcc	tcgggttggtc	cttcccgtcc	
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1320

gtcaccgccc	ccggccagac	cgtgcatggc	gtgaccacca	ccgctttcgc	attcacctcg	
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1380

ttgctgacca	ttccggctctt	caatcagatg	tgggtgtatg	cagtgtccat	cgccgtgtcc	
------------	-------------	------------	------------	------------	------------	--

1440

ttcctcacct	ccttccttct	gatcatcacc	ttcgactacc	gcactccgga	acagaaggcc	
------------	------------	------------	------------	------------	------------	--

1500

gaagtgcctg	cccgtgcggc	tgccaatcag	aagaccgctg	tctcgtcgg	cgaagccaag	
------------	------------	------------	------------	-----------	------------	--

1560

ggagtgcctc	cggctgctgc	caccgcgact	gccactgttg	ccgccaccaa	gactgaagcc	
------------	------------	------------	------------	------------	------------	--

1620

ccggctgctg	ctgccaccac	caccgtgggtg	aacgctccag	tcgcaggcca	tgtgatttcc	
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1680

ctggatgaaa	ccggcgatcc	ggtgttcgca	tcccgcgcac	taggcgaagg	cgtcggcatc	
------------	------------	------------	------------	------------	------------	--

1740

cagccggcag	acagcaccgt	cgtcgcgccg	gtatccggcg	tgctgcagac	cgtcgcggaa	
------------	------------	------------	------------	------------	------------	--

1800

accggtcacg	cattcggcat	caaaaccgat	gatggcgcg	aagtgcctcg	gcacgtcggc	
------------	------------	------------	-----------	------------	------------	--

1860

atcgacacgg	tgaagatgaa	cggcgaaggc	ttcgatgtga	aggtcaaggc	caacgaacac	
------------	------------	------------	------------	------------	------------	--

1920

```

1980  gtgaacgcgg  gggacaacct  cgttgctgctc  gactttgata  aggttaagga  agctggatac
      agcaccacca  cattgatgac  ggtgctgaac  acagtggcct  tcgcgtccgt  cacgccaag
2040  accggcgctcg  acgtcaaggc  cggtgagtcg  gtgatcgaca  ttcagcgctg  a
2091

```

Sequence Number (ID): 10

Length: 21

Molecule Type: DNA

Features Location/Qualifiers:

- source, 1..21
 - > mol_type, other DNA
 - > organism, synthetic construct

Residues:

gggcaagatc ggcacatct a 21

Sequence Number (ID): 11

Length: 21

Molecule Type: DNA

Features Location/Qualifiers:

- source, 1..21
 - > mol_type, other DNA
 - > organism, synthetic construct

Residues:

cacattgggtg gtgttcacgt c 21

Sequence Number (ID): 12

Length: 22

Molecule Type: DNA

Features Location/Qualifiers:

- source, 1..22
 - > mol_type, other DNA
 - > organism, synthetic construct

Residues:

cgagaatgcg aacacgtact tc 22

Sequence Number (ID): 13

Length: 22

Molecule Type: DNA

Features Location/Qualifiers:

- source, 1..22
 - > mol_type, other DNA
 - > organism, synthetic construct

Residues:

ctgctcgggtg ttgtaatcgt tg 22

Sequence Number (ID): 14

Length: 28

Molecule Type: DNA

Features Location/Qualifiers:

- source, 1..28
 - > mol_type, other DNA
 - > organism, synthetic construct

Residues:

tcctgtggat ttcgacgggtg acgagcag 28

Sequence Number (ID): 15

Length: 28

Molecule Type: DNA

Features Location/Qualifiers:

- source, 1..28
 - > mol_type, other DNA
 - > organism, synthetic construct

Residues:

gagtgcgggtt gatggtgcat acggcaag 28

END