

Fact sheet of reference DNA sequences of *Gentiana macrophylla* (秦艽)

Summary	Information
Scientific name	<i>Gentiana macrophylla</i> Pall.
Type of reference material used for data generation	● Plant voucher specimen ● Radix Gentianae Macrophyllae (秦艽)
Plant voucher specimen (number / locality)	● 1 / Tongren City, Qinghai Province, China ● 1 / Qinzhou District, Gansu Province, China ● 1 / Hanbin District, Shaanxi Province, China
Chinese Materia Medica (number / locality)	● 9 / Tongren City, Qinghai Province, China ● 2 / Linxia City, Gansu Province, China ● 2 / Yushu City, Qinghai Province, China ● 4 / Hantai District, Shaanxi Province, China
Total number of specimen	● 20
Specimen source	● GCMTI collection ● Hong Kong Chinese Materia Medica Standards (HKCMMS) Project
Method for data generation	● GCMTI RD-5:2020 (modified DNA extraction, see Appendix 1)
Length of DNA barcode	● Nuclear internal transcribed spacer 2 (ITS2) is

Summary	Information
	232 bp ● Chloroplast <i>psbA-trnH</i> intergenic spacer (<i>psbA-trnH</i>) is 397 bp ● Chloroplast ribulose biphosphate carboxylase large chain (<i>rbcL</i>) is 553 bp

Appendix 1

Modified DNA extraction steps

1. The DNA extracts can be further purified by Zymo Research OneStep PCR inhibitor Removal Kit and Zymo Research DNA Clean & Concentrator-5, if necessary.

Reference DNA Sequence

Plant Specimen

DNA Information

Internal transcribed spacer 2 of nuclear ribosomal RNA (ITS2)

Batch ID. BI241128

>24RD156-1A ITS2

CGCATCGCGTCGCCCCCAACACCGTGTATGAAACAT
TGCCGGTTGTGCGAGGGGCGGATATTGGCTTCCCGTG
CTTCGGTGCGGCTGGCCTAAATGCAAGTCCCTTGCGA
CGGACACGACGACAAGTGGTGGTTGATTGCCTCAACT
AAGGTGYTGTGCGCGCGTTKCCCCGTCGGATGAGGAGA
CTTCCTTGACCCTAATGCAAGCGTCGTCACGACGCCT
GCCACGACCG

Remarks: observation at nucleotide position 155, 167

Chloroplast *psbA-trnH* intergenic spacer (*psbA-trnH*)

Batch ID. BI241128

>24RD156-1A_psbA-trnH

ATAACTTTCCTCTAGACCTAGCTGCTATAGAAATTCC
ATCTATAAATGGATAAGACTTCAGTCTTAATCCTATA
ATATAGGATTAAGAATTAATAAAGGAGCAATAAC
GCCCCCTTGATAAAACAAGAAGTGGATTATTGCTCCT
TTATTTTAATATTTTAATTTTATTCGGTAAGGATTAT
TATTAGAAATTATTATTAGAATATTTTAATAATCTATA
TTCAAATATTATCTATATTAATAATTGACATTACAAT
ATAACTAATTCTAAAAAACTAGTAAAACAAAAAA
TATAAAAAAGAGTTAAAAAAGAAAAATAGTATCAAG
AATTTAAAGACTAAAGAAATACAGATAGTCAAGGGG
CGGATGTAGCCAAGTGATTAAGGCAGT

Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BI241128

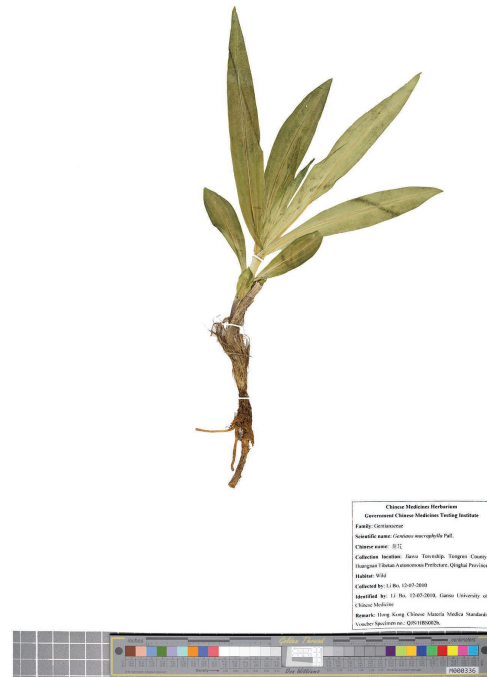
>24RD156-1A_rbcL

AAGTGTGGATTCAAAGCTGGTGTAAAGAGTACAAA
TTGACTTATTATACTCCTGAATACGAAACCAAGGATA
CTGATATCTTGGCAGCATTCCGAGTAACCCCTCAACC
CGGAGTTCACCTGAAGAAGCAGGGGCCGCGGTAGC
TGCCGAATCTTCTACTGGTACATGGACAACCTGTGTGG
ACCGATGGACTTACTAGCCTTGATCGTTACAAAGGGC
GATGCTACCACATTGAGCCCGTTCTTGAGAAGAAGA
TCAATATATTGCTTATGTAGCTTATCCCTTAGACCTTT
TTGAGGAAGGTTCTGTACTAACATGTTTACTTCCATT
GTAGGTAATGTATTTGGGTTCAAAGCCCTACGTGCTC
TACGTCTGGAAGATTTACGAATCCCAACCCGCTTATGT
TAAACTTTCCAAGGCCCTCCTACGGTATCCAAGTT
GAGAGAGATAAATTGAACAAGTATGGTCGCCCCCTGT
TGGGATGTACTATTAAACCTAAATTGGGGTTATCCGC
TAAAACTATGGTAGAGCAGTTTATGAATGTCTT

Reference Detail

Description of reference material	Plant voucher specimen
Scientific name	<i>Gentiana macrophylla</i> Pall.
Laboratory number	24RD156
Sample mark	24RD156-1A
Locality	Tongren City, Qinghai Province, China
Corresponding CMM specimen	24RD373, 25RD5
Authenticated	Yes
Remarks	ITS2: 155Y, 167K

Image



Reference DNA Sequence

Plant Specimen

DNA Information

Internal transcribed spacer 2 of nuclear ribosomal RNA (ITS2)

Batch ID. BI241128

>24RD157-1A ITS2

CGATCGCGTCCGCCCCAACACCGTGTATGAAACAT
TGCCGGTTGTGCGAGGGGCGGATATTGGCTTCCCGTG
CTTCGGTGCGGCTGGCCTAAATGCAAGTCCCTTGCGA
CGGACACGACGACAAGTGGTGGTTGATTGCCTCAACT
AAGGTGCTGTGCGCGCTTGCCCCGTGCGATGAGGAGA
CTTCCTTGACCCCTAATGCAAGCTCGTCACGACGCCT
GCCACGACCG

Chloroplast *psbA-trnH* intergenic spacer (*psbA-trnH*)

Batch ID. BI241128

>24RD157-1A psbA-trnH

ATAACTTTCCTCTAGACCTAGCTGCTATAGAAATTCC
ATCTATAAATGGATAAGACTTCAGTCTTAATCCTATA
ATATAGGATTAAGAATTAATAAGGAGCAATAAC
GCCCCCTTGATAAAACAAGAAGTGGATTATTGCTCCT
TTATTTTAATATTTTAAATTTATTCGGAAGGATTAT
TATTAGAATTAATTATAGAATATTTTAATAATCTATA
TTCAAAATTATCTATATTAATAATTTGACATTACAAT
ATAACTAATTCTAAAAAACTAGTAAAAACAAAAAA
TATAAAAAAGACTTAAAAAAGAAAATAGTATCAAG
AATTTAAAGACTAAAGAAATACAGATAGTCAAGGGG
CGGATGTAGCCAAGTGGATTAAGGCAGT

Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID: BI241128

>24RD157-1A rbcL

AAGTGTGTGGATTCAAAGCTGGTGTATAAAGAGTACAAATGACTTATTATACTCTGAATACGAAACCAAGGATCTGATATCTTGGCAGCATTCGGAGTAAACCCCTCAACCGGAGTTCACCTGAAGAAGCAGGGGCCGCGTAGCTGCCGAATCTTCTACTGGTACATGGACAACATGTGTGGACCGATGGACTTACTAGCCTTGATCGTTACAAAGGGCGATGCTACCACATTGAGCCGTTCTTGGAGAAGAAGATCAATATATGTCTTATGTAGCTTATCCCTTAGACCTTTTGAGGAAGGTTCTGTCTACTAACATGTTTACTTCCATTGAGGTAATGTATTGGGTTCAAAGCCCTACGTGCTCTACGTCTGGAAGATTTACGAATCCCACCCGCTTATGTAAAACTTTCCAAGGCCCTCTCACGGTATCCAAGTTGAGAGAGATAAAATGAACAAGTATGGTCGCCCCCTGTGGGATGTACTATTAACCTAAATGGGGTTATATCCCGTAAAAACTTATGGTAGAGCAGTTTATGAATGTCTT

Reference Detail

Description of reference material	Plant voucher specimen
Scientific name	<i>Gentiana macrophylla</i> Pall.
Laboratory number	24RD157
Sample mark	24RD157-1A
Locality	Qinzhou District, Gansu Province, China
Corresponding CMM specimen	-
Authenticated	Yes
Remarks	-

Image



Reference DNA Sequence

Plant Specimen

DNA Information

Internal transcribed spacer 2 of nuclear ribosomal RNA (ITS2)

Batch ID. BI241128

>24RD158-1A ITS2

CGCATCGCGTCGCCCCCAACACCGTGTATGAAACAT
TGCCGGTTGTGCGAGGGGCGGATATTGGCTTCCCGTG
CTTCGGTGCGGCTGGCCTAAATGCAAGTCCCTTGCGA
CGGACACGACGACAAGTGGTGGTTGATTGCCTCAACT
AAGGTGYTGTGCGCGCTTKCCCCGTCGGATGAGGAGA
CTTCCTTGACCCTAATGCAAGCGTCGTCACGACGCCT
GCCACGACCG

Remarks: observation at nucleotide position 155, 167

Chloroplast *psbA-trnH* intergenic spacer (*psbA-trnH*)

Batch ID. BI241128

>24RD158-1A_psbA-trnH

ATAACTTTCCTCTAGACCTAGCTGCTATAGAAATTCC
ATCTATAAATGGATAAGACTTCAGTCTTAATCCTATA
ATATAGGATTAAGAATTAATAAAGGAGCAATAAC
GCCCCCTTGATAAAACAAGAAGTGGATTATTGCTCCT
TTATTTTAATATTTTAATTTTATTTCGGTAAGGATTAT
TATTAGAAATTATTATTAGAATATTTTAATAATCTATA
TTCAAATATTATCTATATTTAAATATTGACATTACAAT
ATAACTAATTCTAAAAAACTAGTAAAAACAAAAAA
TATAAAAAAGAGTTAAAAAAGAAAAATAGTATCAAG
AATTTAAAGACTAAAGAAATACAGATAGTCAAGGGG
CGGATGTAGCCAAGTGGATTAAGGCAGT

Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BI241128

>24RD158-1A_rbcL

AAGTGTGGATTCAAAGCTGGTGTAAAGAGTACAAA
TTGACTTATTATACTCCTGAATACGAAACCAAGGATA
CTGATATCTTGGCAGCATTCCGAGTAACCCCTCAACC
CGGAGTTCCACCTGAAGAAGCAGGGGCCGCGGTAGC
TGCCGAATCTTCTACTGGTACATGGACAACCTGTGTGG
ACCGATGGACTTACTAGCCTTGATCGTTACAAAGGGC
GATGCTACCACATTGAGCCCGTTCTTGAGAAGAAGA
TCAATATATTGCTTATGTAGCTTATCCCTTAGACCTT
TTGAGGAAGGTTCTGTACTAACATGTTTACTTCCATT
GTAGGTAATGTATTGGGTTCAAAGCCCTACGTGCTC
TACGTCTGGAAGATTTACGAATCCACCCGCTTATGT
TAAACTTTCCAAGGCCCTCCTACGGTATCCAAGTT
GAGAGAGATAAATTGAACAAGTATGGTCGCCCCCTGT
TGGGATGTACTATTAACCTAAATTGGGGTTATCCGC
TAAAACTATGGTAGAGCAGTTTATGAATGTCTT

Reference Detail

Description of reference material	Plant voucher specimen
Scientific name	<i>Gentiana macrophylla</i> Pall.
Laboratory number	24RD158
Sample mark	24RD158-1A
Locality	Hanbin District, Shaanxi Province, China
Corresponding CMM specimen	-
Authenticated	Yes
Remarks	ITS2: 155Y, 167K

Image



Reference DNA Sequence

Chinese Materia Medica (CMM)

DNA Information

Internal transcribed spacer 2 of nuclear ribosomal RNA (ITS2)

Batch ID. BI250507

>25RD5-1A ITS2

CGCATCGCGTCGCCCCCAACACCGTGTATGAAACAT
TGCCGGTTGTGCGAGGGGCGGATATTGGCTTCCCGTG
CTTCGGTGCGGCTGGCCTAAATGCAAGTCCCTTGCGA
CGGACACGACGACAAGTGGTGGTTGATTGCCTCAACT
AAGGTGTTGTGCGCGCTTTCCTCCGTCGGATGAGGAGA
CTTCCTTGACCCTAATGCAAGCGTCGTCACGACGCCT
GCCACGACCG

Chloroplast *psbA-trnH* intergenic spacer (*psbA-trnH*)

Batch ID. BI250507

>25RD5-1A *psbA-trnH*

ATAACTTTCCCTAGACCTAGCTGCTATAGAAATTC
ATCTATAAATGGATAAGACTTCAGTCTTAATCCTATA
ATATAGGATTAAGAATTAATAAAGGAGCAATAAC
GCCCCCTTGATAAAACAAGAAGTGGATTATTGCTCCT
TTATTTTAATATTTTAAATTTTATTCGGTAAGGATTAT
TATTAGAAATTATTATTAGAATATTTTAATAATCTATA
TTCAAATATTATCCATATTAAAAATATTGACATTACAAT
ATAACTAATTCTAAAAAACTAGTAAAAACAAAAAA
TATAAAAAAGAGTTAAAAAAATAAATAGTATCAAG
AATTTAAAGACTAAAGAAATACAGATAGTCAAGGGG
CGGATGTAGCCAAGTGGATTAAGGCAGT

Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BI250507

>25RD5-1A *rbcL*

AAGTGTTGGATTCAAAGCTGGTGTAAAGAGTACAAA
TTGACTTATTATACTCCTGAATACGAAACCAAGGATA
CTGATATCTTGGCAGCATTCCGAGTAACCCCTCAACC
CGGAGTTCCACCTGAAGAAGCAGGGGCCGCGGTAGC
TGCCGAATCTTCTACTGGTACATGGACAACGTGTGTG
ACCGATGGACTTACTAGCCTTGATCGTTACAAAGGGC
GATGCTACCACATTGAGCCCCTTCTGGAGAAGAAGA
TCAATATATTGCTTATGTAGCTTATCCCTTAGACCTTT
TTGAGGAAGGTTCTGTACTAACATGTTTACTTCCATT
GTAGGTAATGTATTTGGGTTCAAAGCCCTACGTGCTC
TACGTCTGGAAGATTACGAATCCCACCGCTTATGT
TAAAACTTTCCAAGGCCCTCCTCACGGTATCCAAGTT
GAGAGAGATAAATTGAACAAGTATGGTCGCCCCCTGT
TGGGATGTACTATTAACCTAAATTGGGGTTATCCGC
TAAAACTATGGTAGAGCAGTTTATGAATGTCTT

Reference Detail

Description of reference material	Specimen of Radix Gentianae Macrophyllae
Scientific name	<i>Gentiana macrophylla</i> Pall.
Laboratory number	25RD5
Sample mark	25RD5-1A
Locality	Tongren City, Qinghai Province, China
Corresponding plant voucher specimen	24RD156
Authenticated	Yes
Remarks	-

Image

Front view



Back view



Reference DNA Sequence

Chinese Materia Medica (CMM)

DNA Information

Internal transcribed spacer 2 of nuclear ribosomal RNA (ITS2)

Batch ID. BI250507

>25RD5-2B ITS2

CGCATCGCGTCGCCCCCAACACCGTGTATGAAACAT
TGCCGGTTGTGCGAGGGGCGGATATTGGCTTCCCGTG
CTTCGGTGCGGCTGGCCTAAATGCAAGTCCCTTGCGA
CGGACACGACGACAAGTGGTGGTTGATTGCCTCAACT
AAGGTGTTGTGCGCGCTTTCCTCCGTCGGATGAGGAGA
CTTCCTTGACCCTAATGCAAGCGTCGTCACGACGCCT
GCCACGACCG

Chloroplast *psbA-trnH* intergenic spacer (*psbA-trnH*)

Batch ID. BI250507

>25RD5-2B_psbA-trnH

ATAACTTTCCTTAGACCTAGCTGCTATAGAAATTCC
ATCTATAAATGGATAAGACTTCAGTCTTAATCTATA
ATATAGGATTAAGAATTAATAAAGGAGCAATAAC
GCCCCCTTGATAAAACAAGAAGTGGATTATTGCTCCT
TTATTTTAATATTTTAATTTTATTTTCGGTAAGGATTAT
TATTAGAAATTATTATTAGAATATTTTAATAATCTATA
TTCAAATATTATCTATATATTAATAATTGACATTACAAT
ATAACTAATTCTAAAAAACTAGTAAAAACAAAAAA
TATAAAAAAGAGTTAAAAAAGAAAAATAGTATCAAG
AATTTAAAGACTAAAGAAATACAGATAGTCAAGGGG
CGGATGTAGCCAAGTGGATTAAGGCAGT

Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BI250507

>25RD5-2B_rbcL

AAGTGTTGGATTCAAAGCTGGTGTAAAGAGTACAAA
TTGACTTATTATACTCCTGAATACGAAACCAAGGATA
CTGATATCTTGGCAGCATTCCGAGTAACCCCTCAACC
CGGAGTTCACCTGAAGAAGCAGGGGCCGCGGTAGC
TGCCGAATCTTCTACTGGTACATGGACAACGTGTGG
ACCGATGGACTTACTAGCCTTGATCGTTACAAAGGGC
GATGCTACCACATTGAGCCCGTTCTTGAGAAGAAGA
TCAATATATTGCTTATGTAGCTTATCCCTTAGACCTTT
TTGAGGAAGGTTCTGTTACTAACATGTTTACTTCCATT
GTAGGTAATGTATTTGGGTTCAAAGCCCTACGTGCTC
TACGTCTGGAAGATTACGAATCCCACCCGCTTATGT
TAAAACTTTCCAAGGCCCTCCTCACGGTATCCAAGTT
GAGAGAGATAAATTGAACAAGTATGGTCGCCCCCTGT
TGGGATGTACTATTAACCTAAATTGGGGTTATCCGC
TAAAACTATGGTAGAGCAGTTTATGAATGTCTT

Reference Detail

Description of reference material	Specimen of Radix Gentianae Macrophyllae
Scientific name	<i>Gentiana macrophylla</i> Pall.
Laboratory number	25RD5
Sample mark	25RD5-2B
Locality	Tongren City, Qinghai Province, China
Corresponding plant voucher specimen	24RD156
Authenticated	Yes
Remarks	-

Image

Front view



Back view



Reference DNA Sequence

Chinese Materia Medica (CMM)

DNA Information

Internal transcribed spacer 2 of nuclear ribosomal RNA (ITS2)

Batch ID. BI250507

>25RD5-3A ITS2

CGCATCGCGTCGCCCCCAACACCGTGTATGAAACAT
TGCCGGTTGTGCGAGGGGCGGATATTGGCTTCCCGTG
CTTCGGTGCGGCTGGCCTAAATGCAAGTCCCTTGCGA
CGGACACGACGACAAGTGGTGGTTGATTGCCTCAACT
AAGGTGTTGTGCGCGCTTTCCCGTCGGATGAGGAGA
CTTCCTTGACCCTAATGCAAGCGTCGTCACGACGCCT
GCCACGACCG

Chloroplast *psbA-trnH* intergenic spacer (*psbA-trnH*)

Batch ID. BI250507

>25RD5-3A *psbA-trnH*

ATAACTTTCTCTAGACCTAGCTGCTATAGAAATTCC
ATCTATAAATGGATAAGACTTCAGTCTTAATCTATA
ATATAGGATTAAGAATTAATAAAGGAGCAATAAC
GCCCCCTTGATAAAACAAGAAGTGGATTATTGCTCCT
TTATTTTAATATTTTAATTTTATTTTCGGTAAGGATTAT
TATTAGAAATTATTATTAGAATATTTTAATAATCTATA
TTCAAATATTATCTATATATTAATAATTGACATTACAAT
ATAACTAATTCTAAAAAACTAGTAAAAACAAAAAA
TATAAAAAAGAGTTAAAAAAAGAAAATAGTATCAAG
AATTTAAAGACTAAAGAAATACAGATAGTCAAGGGG
CGGATGTAGCCAAGTGGATTAAGGCAGT

Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BI250507

>25RD5-3A *rbcL*

AAGTGTTGGATTCAAAGCTGGTGTAAAGAGTACAAA
TTGACTTATTATACTCCTGAATACGAAACCAAGGATA
CTGATATCTTGGCAGCATTCCGAGTAACCCCTCAACC
CGGAGTTCACCTGAAGAAGCAGGGGCCGCGGTAGC
TGCCGAATCTTCTACTGGTACATGGACAACCTGTGTG
ACCGATGGACTTACTAGCCTTGATCGTTACAAAGGGC
GATGCTACCACATTGAGCCCGTTCTTGAGAAGAAGA
TCAATATATTGCTTATGTAGCTTATCCCTTAGACCTTT
TTGAGGAAGGTTCTGTACTAACATGTTTACTTCCATT
GTAGGTAATGTATTTGGGTTCAAAGCCCTACGTGCTC
TACGTCTGGAAGATTACGAATCCCACCCGCTTATGT
TAAAACTTTCCAAGGCCCTCCACGGTATCCAAGTT
GAGAGAGATAAATTGAACAAGTATGGTCGCCCCCTGT
TGGGATGTACTATTAACCTAAATTGGGGTTATCCGC
TAAAACTATGGTAGAGCAGTTTATGAATGTCTT

Reference Detail

Description of reference material	Specimen of Radix Gentianae Macrophyllae
Scientific name	<i>Gentiana macrophylla</i> Pall.
Laboratory number	25RD5
Sample mark	25RD5-3A
Locality	Tongren City, Qinghai Province, China
Corresponding plant voucher specimen	24RD156
Authenticated	Yes
Remarks	-

Image

Front view



Back view



Reference DNA Sequence

Chinese Materia Medica (CMM)

DNA Information

Internal transcribed spacer 2 of nuclear ribosomal RNA (ITS2)

Batch ID. BI250507

>25RD5-4A ITS2

CGCATCGCGTCGCCCCCAACACCGTGTATGAAACAT
TGCCGGTTGTGCGAGGGGCGGATATTGGCTTCCCGTG
CTTCGGTGCGGCTGGCCTAAATGCAAGTCCCTTGCGA
CGGACACGACGACAAGTGGTGGTTGATTGCCTCAACT
AAGGTGTTGTGCGCGCTTTCCTCCGTCGGATGAGGAGA
CTTCCTTGACCCTAATGCAAGCGTCGTCACGACGCCT
GCCACGACCG

Chloroplast *psbA-trnH* intergenic spacer (*psbA-trnH*)

Batch ID. BI250507

>25RD5-4A_psbA-trnH

ATAACTTTCCTTAGACCTAGCTGCTATAGAAATTCC
ATCTATAAATGGATAAGACTTCAGTCTTAATCCTATA
ATATAGGATTAAGAATTAATAAAGGAGCAATAAC
GCCCCCTTGATAAAACAAGAAGTGGATTATTGCTCCT
TTATTTTAATATTTTAATTTTATTTTCGGTAAGGATTAT
TATTAGAAATTATTATTAGAATATTTTAATAATCTATA
TTCAAATATTATCTATATATTAATAATTGACATTACAAT
ATAACTAATTCTAAAAAACTAGTAAAAACAAAAAA
TATAAAAAAGAGTTAAAAAAGAAAAATAGTATCAAG
AATTTAAAGACTAAAGAAATACAGATAGTCAAGGGG
CGGATGTAGCCAAGTGGATTAAGGCAGT

Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BI250507

>25RD5-4A_rbcL

AAGTGTTGGATTCAAAGCTGGTGTAAAGAGTACAAA
TTGACTTATTATACTCCTGAATACGAAACCAAGGATA
CTGATATCTTGGCAGCATTCCGAGTAACCCCTCAACC
CGGAGTTCACCTGAAGAAGCAGGGGCCGCGGTAGC
TGCCGAATCTTCTACTGGTACATGGACAACGTGTGG
ACCGATGGACTTACTAGCCTTGATCGTTACAAAGGGC
GATGCTACCACATTGAGCCCCTTCTTGAGAAGAAGA
TCAATATATTGCTTATGTAGCTTATCCCTTAGACCTTT
TTGAGGAAGGTTCTGTTACTAACATGTTTACTTCCATT
GTAGGTAATGTATTTGGGTTCAAAGCCCTACGTGCTC
TACGTCTGGAAGATTACGAATCCACCCGCTTATGT
TAAAACTTTCCAAGGCCCTCCTCACGGTATCCAAGTT
GAGAGAGATAAATTGAACAAGTATGGTCGCCCCCTGT
TGGGATGTACTATTAACCTAAATTGGGGTTATCCGC
TAAAACTATGGTAGAGCAGTTTATGAATGTCTT

Reference Detail

Description of reference material	Specimen of Radix Gentianae Macrophyllae
Scientific name	<i>Gentiana macrophylla</i> Pall.
Laboratory number	25RD5
Sample mark	25RD5-4A
Locality	Tongren City, Qinghai Province, China
Corresponding plant voucher specimen	24RD156
Authenticated	Yes
Remarks	-

Image

Front view



Back view



Reference DNA Sequence

Chinese Materia Medica (CMM)

DNA Information

Internal transcribed spacer 2 of nuclear ribosomal RNA (ITS2)

Batch ID. BI250829

>25RD5-5A ITS2

CGCATCGCGTCGCCCCCAACACCGTGTATGAAACAT
TGCCGGTTGTGCGAGGGGCGGATATTGGCTTCCCGTG
CTTCGGTGCGGCTGGCCTAAATGCAAGTCCCTTGCGA
CGGACACGACGACAAGTGGTGGTTGATTGCCTCAACT
AAGGTGTTGTGCGCGCTTTCCCGTCGGATGAGGAGA
CTTCCTTGACCCTAATGCAAGCGTCGTCACGACGCCT
GCCACGACCG

Chloroplast *psbA-trnH* intergenic spacer (*psbA-trnH*)

Batch ID. BI250829

>25RD5-5A *psbA-trnH*

ATAACTTTCCTTAGACCTAGCTGCTATAGAAATTCC
ATCTATAAATGGATAAGACTTCAGTCTTAATCTATA
ATATAGGATTAAGAATTAATAAAGGAGCAATAAC
GCCCCCTTGATAAAACAAGAAGTGGATTATTGCTCCT
TTATTTTAATATTTTAAATTTTATTCGGTAAGGATTAT
TATTAGAAATTATTATTAGAATATTTTAATAATCTATA
TTCAAATATTATCTATATTTAAATATTGACATTACAAT
ATAACTAATTCTAAAAAACTAGTAAAAACAAAAAA
TATAAAAAAGAGTTAAAAAAGAAAAATAGTATCAAG
AATTTAAAGACTAAAGAAATACAGATAGTCAAGGGG
CGGATGTAGCCAAGTGGATTAAGGCAGT

Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BI250829

>25RD5-5A *rbcL*

AAGTGTTGGATTCAAAGCTGGTGTAAAGAGTACAAA
TTGACTTATTATACTCCTGAATACGAAACCAAGGATA
CTGATATCTTGGCAGCATTCCGAGTAACCCCTCAACC
CGGAGTTCACCTGAAGAAGCAGGGGCCGCGGTAGC
TGCCGAATCTTCTACTGGTACATGGACAACCTGTGTG
ACCGATGGACTTACTAGCCTTGATCGTTACAAAGGGC
GATGCTACCACATTGAGCCCCTTCTTGAGAAGAAGA
TCAATATATTGCTTATGTAGCTTATCCCTTAGACCTTT
TTGAGGAAGGTTCTGTTACTAACATGTTTACTTCCATT
GTAGGTAATGTATTTGGGTTCAAAGCCCTACGTGCTC
TACGTCTGGAAGATTACGAATCCCACCCGCTTATGT
TAAAACTTTCCAAGGCCCTCCTCACGGTATCCAAGTT
GAGAGAGATAAATTGAACAAGTATGGTCGCCCCCTGT
TGGGATGTACTATTAACCTAAATTGGGGTTATCCGC
TAAAACTATGGTAGAGCAGTTTATGAATGTCTT

Reference Detail

Description of reference material	Specimen of Radix Gentianae Macrophyllae
Scientific name	<i>Gentiana macrophylla</i> Pall.
Laboratory number	25RD5
Sample mark	25RD5-5A
Locality	Tongren City, Qinghai Province, China
Corresponding plant voucher specimen	24RD156
Authenticated	Yes
Remarks	-

Image

Front view



Back view



Reference DNA Sequence

Chinese Materia Medica (CMM)

DNA Information

Internal transcribed spacer 2 of nuclear ribosomal RNA (ITS2)

Batch ID. BI250829

>25RD5-7A ITS2

CGCATCGCGTCGCCCCCAACACCGTGTATGAAACAT
TGCCGGTTGTGCGAGGGGCGGATATTGGCTTCCCGTG
CTTCGGTGCGGCTGGCCTAAATGCAAGTCCCTTGCGA
CGGACACGACGACAAGTGGTGGTTGATTGCCTCAACT
AAGGTGTTGTGCGCGCTTTCCCGTCGGATGAGGAGA
CTTCCTTGACCCTAATGCAAGCGTCGTCACGACGCCT
GCCACGACCG

Chloroplast *psbA-trnH* intergenic spacer (*psbA-trnH*)

Batch ID. BI250829

>25RD5-7A_psbA-trnH

ATAACTTTCCTCTAGACCTAGCTGCTATAGAAATTC
ATCTATAAATGGATAAGACTTCAGTCTTAATCCTATA
ATATAGGATTAAGAATTAATAAAGGAGCAATAAC
GCCCCCTTGATAAAACAAGAAGTGGATTATTGCTCCT
TTATTTTAATATTTTAATTTTATTTTCGGTAAGGATTAT
TATTAGAAATTATTATTAGAATATTTTAATAATCTATA
TTCAAATATTATCTATATTAATAATTTGACATTACAAT
ATAACTAATTCTAAAAAACTAGTAAAAACAAAAAA
TATAAAAAAGAGTTAAAAAAGAAAATAGTATCAAG
AATTTAAAGACTAAAGAAATACAGATAGTCAAGGGG
CGGATGTAGCCAAGTGGATTAAGGCAGT

Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BI250829

>25RD5-7A_rbcL

AAGTGTTGGATTCAAAGCTGGTGTAAAGAGTACAAA
TTGACTTATTATACTCCTGAATACGAAACCAAGGATA
CTGATATCTTGGCAGCATTCCGAGTAACCCCTCAACC
CGGAGTTCACCTGAAGAAGCAGGGGCCGCGGTAGC
TGCCGAATCTTCTACTGGTACATGGACAACCTGTGTGG
ACCGATGGACTTACTAGCCTTGATCGTTACAAAGGGC
GATGCTACCACATTGAGCCCCTTCTTGAGAAGAAGA
TCAATATATTGCTTATGTAGCTTATCCCTTAGACCTTT
TTGAGGAAGGTTCTGTTACTAACATGTTTACTTCCATT
GTAGGTAATGTATTTGGGTTCAAAGCCCTACGTGCTC
TACGTCTGGAAGATTACGAATCCACCCGCTTATGT
TAAAACTTTCCAAGGCCCTCCTCACGGTATCCAAGTT
GAGAGAGATAAATTGAACAAGTATGGTCGCCCCCTGT
TGGGATGTACTATTAACCTAAATTGGGGTTATCCGC
TAAAACTATGGTAGAGCAGTTTATGAATGTCTT

Reference Detail

Description of reference material	Specimen of Radix Gentianae Macrophyllae
Scientific name	<i>Gentiana macrophylla</i> Pall.
Laboratory number	25RD5
Sample mark	25RD5-7A
Locality	Tongren City, Qinghai Province, China
Corresponding plant voucher specimen	24RD156
Authenticated	Yes
Remarks	-

Image

Front view



Back view



Reference DNA Sequence

Chinese Materia Medica (CMM)

DNA Information

Internal transcribed spacer 2 of nuclear ribosomal RNA (ITS2)

Batch ID. BI250829

>25RD5-8A ITS2

CGCATCGCGTCGCCCCCAACACCGTGTATGAAACAT
TGCCGGTTGTGCGAGGGGCGGATATTGGCTTCCCGTG
CTTCGGTGCGGCTGGCCTAAATGCAAGTCCCTTGCGA
CGGACACGACGACAAGTGGTGGTTGATTGCCTCAACT
AAGGTGTTGTGCGCGCTTTCCTCCGTCGGATGAGGAGA
CTTCCTTGACCCTAATGCAAGCGTCGTCACGACGCCT
GCCACGACCG

Chloroplast *psbA-trnH* intergenic spacer (*psbA-trnH*)

Batch ID. BI250829

>25RD5-8A_psbA-trnH

ATAACTTTCCTCTAGACCTAGCTGCTATAGAAATTC
ATCTATAAATGGATAAGACTTCAGTCTTAATCCTATA
ATATAGGATTAAGAATTAATAAAGGAGCAATAAC
GCCCCCTTGATAAAACAAGAAGTGGATTATTGCTCCT
TTATTTTAATATTTTAATTTTATTTTCGGTAAGGATTAT
TATTAGAAATTATTATTAGAATATTTTAATAATCTATA
TTCAAATATTATCTATATTAATAATATTGACATTACAAT
ATAACTAATTCTAAAAAACTAGTAAAAACAAAAAA
TATAAAAAAGAGTTAAAAAAAGAAAATAGTATCAAG
AATTTAAAGACTAAAGAAATACAGATAGTCAAGGGG
CGGATGTAGCCAAGTGGATTAAGGCAGT

Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BI250829

>25RD5-8A_rbcL

AAGTGTTGGATTCAAAGCTGGTGTAAAGAGTACAAA
TTGACTTATTATACTCCTGAATACGAAACCAAGGATA
CTGATATCTTGGCAGCATTCCGAGTAACCCCTCAACC
CGGAGTTCACCTGAAGAAGCAGGGGCCGCGGTAGC
TGCCGAATCTTCTACTGGTACATGGACAACCTGTGTG
ACCGATGGACTTACTAGCCTTGATCGTTACAAAGGGC
GATGCTACCACATTGAGCCCCTTCTTGAGAAGAAGA
TCAATATATTGCTTATGTAGCTTATCCCTTAGACCTTT
TTGAGGAAGGTTCTGTTACTAACATGTTTACTTCCATT
GTAGGTAATGTATTTGGGTTCAAAGCCCTACGTGCTC
TACGTCTGGAAGATTACGAATCCACCCGCTTATGT
TAAAACTTTCCAAGGCCCTCCTCACGGYATCCAAGTT
GAGAGAGATAAATTGAACAAGTATGGTCGCCCCCTGT
TGGGATGTACTATTAACCTAAATTGGGGTTATCCGC
TAAAACTATGGTAGAGCAGTTTATGAATGTCTT

Remarks: observation at nucleotide position 436

Reference Detail

Description of reference material	Specimen of Radix Gentianae Macrophyllae
Scientific name	<i>Gentiana macrophylla</i> Pall.
Laboratory number	25RD5
Sample mark	25RD5-8A
Locality	Tongren City, Qinghai Province, China
Corresponding plant voucher specimen	24RD156
Authenticated	Yes
Remarks	rbcL: 436Y

Image

Front view



Back view



Reference DNA Sequence

Chinese Materia Medica (CMM)

DNA Information

Internal transcribed spacer 2 of nuclear ribosomal RNA (ITS2)

Batch ID. BI250605

>25RD6-5A ITS2

CGCATCGCGTCGCCCCCAACACCGTGTATGAAACAT
TGCCGGTTGTGCGAGGGGCGGATATTGGCTTCCCGTG
CTTCGGTGCGGCTGGCCTAAATGCAAGTCCCTTGCGA
CGGACACGACGACAAGTGGTGGTTGATTGCCTCAACT
AAGGTGTTGTGCGCGCTTTCCTCCGTCGGATGAGGAGA
CTTCCTTGACCCTAATGCAAGCGTCGTCACGACGCCT
GCCACGACCG

Chloroplast *psbA-trnH* intergenic spacer (*psbA-trnH*)

Batch ID. BI250605

>25RD6-5A *psbA-trnH*

ATAACTTTCCTTAGACCTAGCTGCTATAGAAATTCC
ATCTATAAATGGATAAGACTTCAGTCTTAATCTATA
ATATAGGATTAAGAATTAATAAAGGAGCAATAAC
GCCCCCTTGATAAAACAAGAAGTGGATTATTGCTCCT
TTATTTTAATATTTTAATTTTATTTTCGGTAAGGATTAT
TATTAGAAATTATTATTAGAATATTTTAATAATCTATA
TTCAAATATTATCTATATATTAATAATTGACATTACAAT
ATAACTAATTCTAAAAAACTAGTAAAAACAAAAAA
TATAAAAAAGAGTTAAAAAAGAAAAATAGTATCAAG
AATTTAAAGACTAAAGAAATACAGATAGTCAAGGGG
CGGATGTAGCCAAGTGGATTAAGGCAGT

Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BI250605

>25RD6-5A *rbcL*

AAGTGTTGGATTCAAAGCTGGTGTAAAGAGTACAAA
TTGACTTATTATACTCCTGAATACGAAACCAAGGATA
CTGATATCTTGGCAGCATTCCGAGTAACCCCTCAACC
CGGAGTTCCACCTGAAGAAGCAGGGGCCGCGGTAGC
TGCCGAATCTTCTACTGGTACATGGACAACCTGTGTG
ACCGATGGACTTACTAGCCTTGATCGTTACAAAGGGC
GATGCTACCACATTGAGCCCCTTCTTGAGAAGAAGA
TCAATATATTGCTTATGTAGCTTATCCCTTAGACCTTT
TTGAGGAAGGTTCTGTACTAACATGTTTACTTCCATT
GTAGGTAATGTATTTGGGTTCAAAGCCCTACGTGCTC
TACGTCTGGAAGATTACGAATCCACCCGCTTATGT
TAAAACTTTCCAAGGCCCTCCTCACGGYATCCAAGTT
GAGAGAGATAAATTGAACAAGTATGGTCGCCCCCTGT
TGGGATGTACTATTAAACCTAAATTGGGGTTATCCGC
TAAAACTATGGTAGAGCAGTTTATGAATGTCTT

Remarks: observation at nucleotide position 436

Reference Detail

Description of reference material	Specimen of Radix Gentianae Macrophyllae
Scientific name	<i>Gentiana macrophylla</i> Pall.
Laboratory number	25RD6
Sample mark	25RD6-5A
Locality	Linxia City, Gansu Province, China
Corresponding plant voucher specimen	-
Authenticated	Yes
Remarks	rbcL: 436Y

Image

Front view



Back view



Reference DNA Sequence

Chinese Materia Medica (CMM)

DNA Information

Internal transcribed spacer 2 of nuclear ribosomal RNA (ITS2)

Batch ID. BI250605

>25RD7-3B ITS2

CGCATCGCGTCGCCCCCAACACCGTGTATGAAACAT
TGCCGGTTGTGCGAGGGGCGGATATTGGCTTCCCGTG
CTTCGGTGCGGCTGGCCTAAATGCAAGTCCCTTGCGA
CGGACACGACGACAAGTGGTGGTTGATTGCCTCAACT
AAGGTGTTGTGCGCGCTTTCCCGTCGGATGAGGAGA
CTTCCTTGACCCTAATGCAAGCGTCGTCACGACGCCT
GCCACGACCG

Chloroplast *psbA-trnH* intergenic spacer (*psbA-trnH*)

Batch ID. BI250605

>25RD7-3B_psbA-trnH

ATAACTTTCCCTAGACCTAGCTGCTATAGAAATTC
ATCTATAAATGGATAAGACTTCAGTCTTAATCCTATA
ATATAGGATTAAGAATTAATAAAGGAGCAATAAC
GCCCCCTTGATAAAACAAGAAGTGGATTATTGCTCCT
TTATTTTAATATTTTAATTTTATTTTCGGTAAGGATTAT
TATTAGAAATTATTATTAGAATATTTTAATAATCTATA
TTCAAATATTATCTATATTAATAATTTGACATTACAAT
ATAACTAATTCTAAAAAACTAGTAAAAACAAAAAA
TATAAAAAAGAGTTAAAAAAGAAAATAGTATCAAG
AATTTAAAGACTAAAGAAATACAGATAGTCAAGGGG
CGGATGTAGCCAAGTGGATTAAGGCAGT

Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BI250605

>25RD7-3B_rbcL

AAGTGTTGGATTCAAAGCTGGTGTAAAGAGTACAAA
TTGACTTATTATACTCCTGAATACGAAACCAAGGATA
CTGATATCTTGGCAGCATTCCGAGTAACCCCTCAACC
CGGAGTTCACCTGAAGAAGCAGGGGCCGCGGTAGC
TGCCGAATCTTCTACTGGTACATGGACAACGTGTGG
ACCGATGGACTTACTAGCCTTGATCGTTACAAAGGGC
GATGCTACCACATTGAGCCCGTTCTTGAGAAGAAGA
TCAATATATTGCTTATGTAGCTTATCCCTTAGACCTTT
TTGAGGAAGGTTCTGTTACTAACATGTTTACTTCCATT
GTAGGTAATGTATTTGGGTTCAAAGCCCTACGTGCTC
TACGTCTGGAAGATTACGAATCCACCCGCTTATGT
TAAAACTTTCCAAGGCCCTCCACGGTATCCAAGTT
GAGAGAGATAAATTGAACAAGTATGGTCGCCCCCTGT
TGGGATGTACTATTAACCTAAATTGGGGTTATCCGC
TAAAACTATGGTAGAGCAGTTTATGAATGTCTT

Reference Detail

Description of reference material	Specimen of Radix Gentianae Macrophyllae
Scientific name	<i>Gentiana macrophylla</i> Pall.
Laboratory number	25RD7
Sample mark	25RD7-3B
Locality	Yushu City, Qinghai Province, China
Corresponding plant voucher specimen	-
Authenticated	Yes
Remarks	-

Image

Front view



Back view



Reference DNA Sequence

Chinese Materia Medica (CMM)

DNA Information

Internal transcribed spacer 2 of nuclear ribosomal RNA (ITS2)

Batch ID. BI250605

>25RD8-1A ITS2

CGCATCGCGTCGCCCCCAACACCGTGTATGAAACAT
TGCCGTTGTGCGAGGGGCGGATATTGGCTTCCCGTG
CTTCGGTGCGGCTGGCCTAAATGCAAGTCCCTTGCGA
CGGACACGACGACAAGTGGTGGTTGATTGCCTCAACT
AAGGTGTTGTGCGCGCTTCCCGTCGGATGAGGAGA
CTTCCTTGACCCTAATGCAAGCGTCGTCACGACGCCT
GCCACGACCG

Chloroplast *psbA-trnH* intergenic spacer (*psbA-trnH*)

Batch ID. BI250605

>25RD8-1A *psbA-trnH*

ATAACTTTCCTCTAGACCTAGCTGCTATAGAAATTC
ATCTATAAATGGATAAGACTTCAGTCTTAATCTATA
ATATAGGATTAAGAATTAATAAAGGAGCAATAAC
GCCCCCTTGATAAAACAAGAAGTGGATTATTGCTCCT
TTATTTTAATATTTTAATTTTATTTTCGGTAAGGATTAT
TATTAGAAATTATTATTAGAATATTTTAATAATCTATA
TTCAAATATTATCCATATTAAATATTGACATTACAAT
ATAACTAATTCTAAAAAACTAGTAAAAACAAAAAA
TATAAAAAAGAGTTAAAAAATAAATAGTATCAAG
AATTTAAAGACTAAAGAAATACAGATAGTCAAGGGG
CGGATGTAGCCAAGTGGATTAAGGCAGT

Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BI250605

>25RD8-1A *rbcL*

AAGTGTTGGATTCAAAGCTGGTGTAAAGAGTACAAA
TTGACTTATTATACTCCTGAATACGAAACCAAGGATA
CTGATATCTTGGCAGCATTCCGAGTAACCCCTCAACC
CGGAGTTCACCTGAAGAAGCAGGGGCCGCGGTAGC
TGCCGAATCTTCTACTGGTACATGGACAACCTGTGTG
ACCGATGGACTTACTAGCCTTGATCGTTACAAAGGGC
GATGCTACCACATTGAGCCCCTTCTTGAGAAGAAGA
TCAATATATTGCTTATGTAGCTTATCCCTTAGACCTTT
TTGAGGAAGGTTCTGTACTAACATGTTTACTTCCATT
GTAGGTAATGTATTTGGGTTCAAAGCCCTACGTGCTC
TACGTCTGGAAGATTACGAATCCACCCGCTTATGT
TAAAACTTTCCAAGGCCCTCCTCACGGTATCCAAGTT
GAGAGAGATAAATTGAACAAGTATGGTCGCCCCCTGT
TGGGATGTACTATTAACCTAAATTGGGGTTATCCGC
TAAAACTATGGTAGAGCAGTTTATGAATGTCTT

Reference Detail

Description of reference material	Specimen of Radix Gentianae Macrophyllae
Scientific name	<i>Gentiana macrophylla</i> Pall.
Laboratory number	25RD8
Sample mark	25RD8-1A
Locality	Hantai District, Shaanxi Province, China
Corresponding plant voucher specimen	-
Authenticated	Yes
Remarks	-

Image

Front view



Back view



Reference DNA Sequence

Chinese Materia Medica (CMM)

DNA Information

Internal transcribed spacer 2 of nuclear ribosomal RNA (ITS2)

Batch ID. BI250605

>25RD8-2A ITS2

CGCATCGCGTCGCCCCCAACACCGTGTATGAAACAT
TGCCGGTTGTGCGAGGGGCGGATATTGGCTTCCCGTG
CTTCGGTGCGGCTGGCCTAAATGCAAGTCCCTTGCGA
CGGACACGACGACAAGTGGTGGTTGATTGCCTCAACT
AAGGTGTTGTGCGCGCTTCCCGTCGGATGAGGAGA
CTTCCTTGACCCTAATGCAAGCGTCGTCACGACGCCT
GCCACGACCG

Chloroplast *psbA-trnH* intergenic spacer (*psbA-trnH*)

Batch ID. BI250605

>25RD8-2A_psbA-trnH

ATAACTTTCCTCTAGACCTAGCTGCTATAGAAATTC
ATCTATAAATGGATAAGACTTCAGTCTTAATCTATA
ATATAGGATTAAGAATTAATAAAGGAGCAATAAC
GCCCCCTTGATAAAACAAGAAGTGGATTATTGCTCCT
TTATTTTAATATTTTAAATTTTATTCGGTAAGGATTAT
TATTAGAAATTATTATTAGAATATTTTAATAATCTATA
TTCAAATATTATCTATATTAATAATTTGACATTACAAT
ATAACTAATTCTAAAAAACTAGTAAAAACAAAAAA
TATAAAAAAGAGTTAAAAAAGAAAATAGTATCAAG
AATTTAAAGACTAAAGAAATACAGATAGTCAAGGGG
CGGATGTAGCCAAGTGGATTAAGGCAGT

Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BI250605

>25RD8-2A_rbcL

AAGTGTTGGATTCAAAGCTGGTGTAAAGAGTACAAA
TTGACTTATTATACTCCTGAATACGAAACCAAGGATA
CTGATATCTTGGCAGCATTCCGAGTAACCCCTCAACC
CGGAGTTCACCTGAAGAAGCAGGGGCCGCGGTAGC
TGCCGAATCTTCTACTGGTACATGGACAACCTGTGTGG
ACCGATGGACTTACTAGCCTTGATCGTTACAAAGGGC
GATGCTACCACATTGAGCCCCTTCTTGAGAAGAAGA
TCAATATATTGCTTATGTAGCTTATCCCTTAGACCTTT
TTGAGGAAGGTTCTGTTACTAACATGTTTACTTCCATT
GTAGGTAATGTATTTGGGTTCAAAGCCCTACGTGCTC
TACGTCTGGAAGATTACGAATCCACCCGCTTATGT
TAAAACTTTCCAAGGCCCTCCTCACGGTATCCAAGTT
GAGAGAGATAAATTGAACAAGTATGGTCGCCCCCTGT
TGGGATGTACTATTAACCTAAATTGGGGTTATCCGC
TAAAACTATGGTAGAGCAGTTTATGAATGTCTT

Reference Detail

Description of reference material	Specimen of Radix Gentianae Macrophyllae
Scientific name	<i>Gentiana macrophylla</i> Pall.
Laboratory number	25RD8
Sample mark	25RD8-2A
Locality	Hantai District, Shaanxi Province, China
Corresponding plant voucher specimen	-
Authenticated	Yes
Remarks	-

Image

Front view



Back view



Reference DNA Sequence

Chinese Materia Medica (CMM)

DNA Information

Internal transcribed spacer 2 of nuclear ribosomal RNA (ITS2)

Batch ID. BI250605

>25RD8-5A ITS2

CGCATCGCGTCGCCCCCAACACCGTGTATGAAACAT
TGCCGGTTGTGCGAGGGGCGGATATTGGCTTCCCGTG
CTTCGGTGCGGCTGGCCTAAATGCAAGTCCCTTGCGA
CGGACACGACGACAAGTGGTGGTTGATTGCCTCAACT
AAGGTGTTGTGCGCGCTTCCCGTCGGATGAGGAGA
CTTCCTTGACCCTAATGCAAGCGTCGTCACGACGCCT
GCCACGACCG

Chloroplast *psbA-trnH* intergenic spacer (*psbA-trnH*)

Batch ID. BI250605

>25RD8-5A *psbA-trnH*

ATAACTTTCCTCTAGACCTAGCTGCTATAGAAATTC
ATCTATAAATGGATAAGACTTCAGTCTTAATCTATA
ATATAGGATTAAGAATTAATAAAGGAGCAATAAC
GCCCCCTTGATAAAACAAGAAGTGGATTATTGCTCCT
TTATTTTAATATTTTAAATTTTATTCGGTAAGGATTAT
TATTAGAAATTATTATTAGAATATTTTAATAATCTATA
TTCAAATATTATCTATATATTAATAATTGACATTACAAT
ATAACTAATTCTAAAAAACTAGTAAAAACAAAAAA
TATAAAAAAGAGTTAAAAAAGAAAATAGTATCAAG
AATTTAAAGACTAAAGAAATACAGATAGTCAAGGGG
CGGATGTAGCCAAGTGGATTAAGGCAGT

Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BI250605

>25RD8-5A *rbcL*

AAGTGTTGGATTCAAAGCTGGTGTAAAGAGTACAAA
TTGACTTATTATACTCCTGAATACGAAACCAAGGATA
CTGATATCTTGGCAGCATTCCGAGTAACCCCTCAACC
CGGAGTTCACCTGAAGAAGCAGGGGCCGCGGTAGC
TGCCGAATCTTCTACTGGTACATGGACAACGTGTGG
ACCGATGGACTTACTAGCCTTGATCGTTACAAAGGGC
GATGCTACCACATTGAGCCCCTTCTTGAGAAGAAGA
TCAATATATTGCTTATGTAGCTTATCCCTTAGACCTTT
TTGAGGAAGGTTCTGTTACTAACATGTTTACTTCCATT
GTAGGTAATGTATTTGGGTTCAAAGCCCTACGTGCTC
TACGTCTGGAAGATTACGAATCCACCCGCTTATGT
TAAAACTTTCCAAGGCCCTCCTCACGGTATCCAAGTT
GAGAGAGATAAATTGAACAAGTATGGTCGCCCCCTGT
TGGGATGTACTATTAAACCTAAATTGGGGTTATCCGC
TAAAACTATGGTAGACAGTTTATGAATGTCTT

Reference Detail

Description of reference material	Specimen of Radix Gentianae Macrophyllae
Scientific name	<i>Gentiana macrophylla</i> Pall.
Laboratory number	25RD8
Sample mark	25RD8-5A
Locality	Hantai District, Shaanxi Province, China
Corresponding plant voucher specimen	-
Authenticated	Yes
Remarks	-

Image

Front view



Back view



Reference DNA Sequence

Chinese Materia Medica (CMM)

DNA Information

Internal transcribed spacer 2 of nuclear ribosomal RNA (ITS2)

Batch ID. BI250829

>25RD8-10A ITS2

CGCATCGCGTCGCCCCCAACACCGTGTATGAAACAT
TGCCGTTGTGCGAGGGGCGGATATTGGCTTCCCGTG
CTTCGGTGCGGCTGGCCTAAATGCAAGTCCCTTGCGA
CGGACACGACGACAAGTGGTGGTTGATTGCCTCAACT
AAGGTGTTGTGCGCGCTTCCCGTCGGATGAGGAGA
CTTCCTTGACCCTAATGCAAGCGTCGTCACGACGCCT
GCCACGACCG

Chloroplast *psbA-trnH* intergenic spacer (*psbA-trnH*)

Batch ID. BI250829

>25RD8-10A_psbA-trnH

ATAACTTTCCTCTAGACCTAGCTGTATAGAAATTCC
ATCTATAAATGGATAAGACTTCAGTCTTAATCCTATA
ATATAGGATTAAGAATTAATAAAGGAGCAATAAC
GCCCCCTTGATAAAACAAGAAGTGGATTATTGCTCCT
TTATTTTAATATTTTAATTTTATTTTCGGTAAGGATTAT
TATTAGAAATTATTATTAGAATATTTTAATAATCTATA
TTCAAATATTATCTATATTAATAATTTGACATTACAAT
ATAACTAATTCTAAAAAACTAGTAAAAACAAAAAA
TATAAAAAAGAGTTAAAAAAGAAAATAGTATCAAG
AATTTAAAGACTAAAGAAATACAGATAGTCAAGGGG
CGGATGTAGCCAAGTGGATTAAGGCAGT

Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BI250829

>25RD8-10A_rbcL

AAGTGTGGATTCAAAGCTGGTGTAAAGAGTACAAA
TTGACTTATTATACTCCTGAATACGAAACCAAGGATA
CTGATATCTTGGCAGCATTCCGAGTAACCCCTCAACC
CGGAGTTCACCTGAAGAAGCAGGGGCCGCGGTAGC
TGCCGAATCTTCTACTGGTACATGGACAACCTGTGTGG
ACCGATGGACTTACTAGCCTTGATCGTTACAAAGGGC
GATGCTACCACATTGAGCCCCTTCTGGAGAAGAAGA
TCAATATATTGCTTATGTAGCTTATCCCTTAGACCTTT
TTGAGGAAGGTTCTGTTACTAACATGTTTACTTCCATT
GTAGGTAATGTATTTGGGTTCAAAGCCCTACGTGCTC
TACGTCTGGAAGATTACGAATCCCACCCGCTTATGT
TAAAACTTTCCAAGGCCCTCCTCACGGTATCCAAAGTT
GAGAGAGATAAATTGAACAAGTATGGTCGCCCCCTGT
TGGGATGTACTATTAACCTAAATTGGGGTTATCCGC
TAAAACTATGGTAGACAGTTTATGAATGTCTT

Reference Detail

Description of reference material	Specimen of Radix Gentianae Macrophyllae
Scientific name	<i>Gentiana macrophylla</i> Pall.
Laboratory number	25RD8
Sample mark	25RD8-10A
Locality	Hantai District, Shaanxi Province, China
Corresponding plant voucher specimen	-
Authenticated	Yes
Remarks	-

Image

Front view



Back view



Reference DNA Sequence

Chinese Materia Medica (CMM)

DNA Information

Internal transcribed spacer 2 of nuclear ribosomal RNA (ITS2)

Batch ID. BI250114

>24RD373-1A ITS2

CGCATCGCGTCGCCCCCAACACCGTGTATGAAACAT
TGCCGGTTGTTCGAGGGGCGGATATTGGCTTCCCGTG
CTTCGGTGCGGCTGGCCTAAATGCAAGTCCCTTGCGA
CGGACACGACGACAAGTGGTGGTTGATTGCCTCAACT
AAGGTGTTGTTCGCGCGTTTCCCGTCGGATGAGGAGA
CTTCCTTGACCCTAATGCAAGCGTCGTCACGACGCCT
GCCACGACCG

Chloroplast *psbA-trnH* intergenic spacer (*psbA-trnH*)

Batch ID. BI250114

>24RD373-1A_psbA-trnH

ATAACTTTCTCTAGACCTAGCTGCTATAGAAATTCC
ATCTATAAATGGATAAGACTTCAGTCTTAATCCTATA
ATATAGGATTAAGAATTAATAAAGGAGCAATAAC
GCCCCCTTGATAAAACAAGAAGTGGATTATTGCTCCT
TTATTTTAATATTTTAATTTTATTTTCGGTAAGGATTAT
TATTAGAAATTATTATTAGAATATTTTAATAATCTATA
TTCAAATATTATCTATATATTAATAATTGACATTACAAT
ATAACTAATTCTAAAAAACTAGTAAAAACAAAAAA
TATAAAAAAGAGTTAAAAAAGAAAAATAGTATCAAG
AATTTAAAGACTAAAGAAATACAGATAGTCAAGGGG
CGGATGTAGCCAAGTGGATTAAGGCAGT

Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BI250114

>24RD373-1A_rbcL

AAGTGTGGATTCAAAGCTGGTGTAAAGAGTACAAA
TTGACTTATTATACTCCTGAATACGAAACCAAGGATA
CTGATATCTTGGCAGCATTCCGAGTAACCCCTCAACC
CGGAGTTCCACCTGAAGAAGCAGGGGCCGCGGTAGC
TGCCGAATCTTCTACTGGTACATGGACAACCTGTGTGG
ACCGATGGACTTACTAGCCTTGATCGTTACAAAGGGC
GATGCTACCACATTGAGCCCCTTCTTGAGAAGAAGA
TCAATATATTGCTTATGTAGCTTATCCCTTAGACCTTT
TTGAGGAAGGTTCTGTACTAACATGTTTACTTCCATT
GTAGGTAATGTATTTGGGTTCAAAGCCCTACGTGCTC
TACGTCTGGAAGATTACGAATCCCACCCGCTTATGT
TAAAACTTTCCAAGGCCCTCCACGGTATCCAAGTT
GAGAGAGATAAATTGAACAAGTATGGTCGCCCCCTGT
TGGGATGTACTATTAACCTAAATTGGGGTTATCCGC
TAAAACTATGGTAGAGCAGTTTATGAATGTCTT

Reference Detail

Description of reference material	Specimen of Radix Gentianae Macrophyllae
Scientific name	<i>Gentiana macrophylla</i> Pall.
Laboratory number	24RD373
Sample mark	24RD373-1A
Locality	Tongren City, Qinghai Province, China
Corresponding plant voucher specimen	24RD156
Authenticated	Yes
Remarks	-

Image

Front view



Back view



Reference DNA Sequence

Chinese Materia Medica (CMM)

DNA Information

Internal transcribed spacer 2 of nuclear ribosomal RNA (ITS2)

Batch ID. BI250114

>24RD373-2A ITS2

CGCATCGCGTCGCCCCCAACACCGTGTATGAAACAT
TGCCGGTTGTGCGAGGGGCGGATATTGGCTTCCCGTG
CTTCGGTGCGGCTGGCCTAAATGCAAGTCCCTTGCGA
CGGACACGACGACAAGTGGTGGTTGATTGCCYCAACT
AAGGTGYTGTGCGCGCTTKCCCCGTCGGATGAGGAGA
CTTCCTTGACCCTAATGCAAGCGTCGTCACGACGCCT
GCCACGACCG

Remarks: observation at nucleotide position 143, 155, 167

Chloroplast *psbA-trnH* intergenic spacer (*psbA-trnH*)

Batch ID. BI250114

>24RD373-2A_psbA-trnH

ATAACTTTCCTCTAGACCTAGCTGCTATAGAAATTCC
ATCTATAAATGGATAAGACTTCAGTCTTAATCCTATA
ATATAGGATTAAGAATTAATAAAGGAGCAATAAC
GCCCCCTTGATAAAACAAGAAGTGGATTATTGCTCCT
TTATTTTAATATTTTAATTTTATTTCGGTAAGGATTAT
TATTAGAAATTATTATTAGAATATTTTAATAATCTATA
TTCAAATATTATCTATATTAATAATTGACATTACAAT
ATAACTAATTCTAAAAAACTAGTAAAACAAAAAA
TATAAAAAAGAGTTAAAAAAGAAAAATAGTATCAAG
AATTTAAAGACTAAAGAAATACAGATAGTCAAGGGG
CGGATGTAGCCAAGTGGATTAAGGCAGT

Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BI250114

>24RD373-2A_rbcL

AAGTGTTGGATTCAAAGCTGGTGTAAAGAGTACAAA
TTGACTTATTATACTCCTGAATACGAAACCAAGGATA
CTGATATCTTGGCAGCATTCCGAGTAACCCCTCAACC
CGGAGTTCCACCTGAAGAAGCAGGGGCCGCGGTAGC
TGCCGAATCTTCTACTGGTACATGGACAACCTGTGTGG
ACCGATGGACTTACTAGCCTTGATCGTTACAAAGGGC
GATGCTACCACATTGAGCCCGTTCTTGAGAAGAAGA
TCAATATATTGCTTATGTAGCTTATCCCTTAGACCTTT
TTGAGGAAGGTTCTGTACTAACATGTTTACTTCCATT
GTAGGTAATGTATTGGGTTCAAAGCCCTACGTGCTC
TACGTCTGGAAGATTTACGAATCCCAACCCGCTTATGT
TAAACTTTCCAAGGCCCTCCTACGGTATCCAAGTT
GAGAGAGATAAATTGAACAAGTATGGTCGCCCCCTGT
TGGGATGTACTATTAACCTAAATTGGGGTTATCCGC
TAAAACTATGGTAGAGCAGTTTATGAATGTCTT

Reference Detail

Description of reference material	Specimen of Radix Gentianae Macrophyllae
Scientific name	<i>Gentiana macrophylla</i> Pall.
Laboratory number	24RD373
Sample mark	24RD373-2A
Locality	Tongren City, Qinghai Province, China
Corresponding plant voucher specimen	24RD156
Authenticated	Yes
Remarks	ITS2: 143Y, 155Y, 167K

Image

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Back view



Reference DNA Sequence

Chinese Materia Medica (CMM)

DNA Information

Internal transcribed spacer 2 of nuclear ribosomal RNA (ITS2)

Batch ID. BI250127

>24RD376-2A ITS2

CGCATCGCGTCGCCCCCAACACCGTGTATGAAACAT
TGCCGGTTGTGCGAGGGGCGGATATTGGCTTCCCGTG
CTTCGGTGCGGCTGGCCTAAATGCAAGTCCCTTGCGA
CGGACACGACGACAAGTGGTGGTTGATTGCMTCAAC
TAAAGGTGTTGTGCGCGCTTTCCCGTCGGATGAGGAG
ACTTCCTTGACCCTAATGCAAGCGTCGTCACGACGCC
TGCCACGACCG

Remarks: observation at nucleotide position 142

Chloroplast *psbA-trnH* intergenic spacer (*psbA-trnH*)

Batch ID. BI250127

>24RD376-2A_psbA-trnH

ATAACTTTCCTCTAGACCTAGCTGCTATAGAAATTCC
ATCTATAAATGGATAAGACTTCAGTCTTAATCCTATA
ATATAGGATTAAGAATTAATAAAGGAGCAATAAC
GCCCCCTTGATAAAACAAGAAGTGGATTATTGCTCCT
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Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BI250127

>24RD376-2A_rbcL

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Reference Detail

Description of reference material	Specimen of Radix Gentianae Macrophyllae
Scientific name	<i>Gentiana macrophylla</i> Pall.
Laboratory number	24RD376
Sample mark	24RD376-2A
Locality	Linxia City, Gansu Province, China
Corresponding plant voucher specimen	-
Authenticated	Yes
Remarks	ITS2: 142M

Image

Front view



Back view



Reference DNA Sequence

Chinese Materia Medica (CMM)

DNA Information

Internal transcribed spacer 2 of nuclear ribosomal RNA (ITS2)

Batch ID. BI250127

>24RD377-2A ITS2

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TGCCGGTTGTGCGAGGGGCGGATATTGGCTTCCCGTG
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CGGACACGACGACAAGTGGTGGTTGATTGMCYCAAC
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TGCCACGACCG

Remarks: observation at nucleotide position 141, 143, 155

Chloroplast *psbA-trnH* intergenic spacer (*psbA-trnH*)

Batch ID. BI250127

>24RD377-2A_psbA-trnH

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Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BI250127

>24RD377-2A_rbcL

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Reference Detail

Description of reference material	Specimen of Radix Gentianae Macrophyllae
Scientific name	<i>Gentiana macrophylla</i> Pall.
Laboratory number	24RD377
Sample mark	24RD377-2A
Locality	Yushu City, Qinghai Province, China
Corresponding plant voucher specimen	-
Authenticated	Yes
Remarks	ITS2: 141M, 143Y, 155Y

Image

Front view



Back view



Reference DNA sequences in FASTA format

Internal transcribed spacer 2 of nuclear ribosomal RNA (ITS2) sequence of plant voucher specimen of *Gentiana macrophylla* and Chinese Materia Medica (CMM) Radix Gentianae Macrophyllae

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Chloroplast *psbA-trnH* intergenic spacer (*psbA-trnH*) sequence of plant voucher specimen of *Gentiana macrophylla* and Chinese Materia Medica (CMM) Radix *Gentianae Macrophyllae*

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Partial chloroplast ribulose biphosphate carboxylase large chain (*rbcL*) sequence of plant voucher specimen of *Gentiana macrophylla* and Chinese Materia Medica (CMM) Radix *Gentianae Macrophyllae*

>24RD156-1A_rbcL

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