

Fact sheet of reference DNA sequences of *Saussurea involucrata* (天山雪蓮/雪蓮花)

Summary	Information
Scientific name	<i>Saussurea involucrata</i> Kar. et Kir.
Type of reference material used for data generation	● Herba Saussureae Involucratae (天山雪蓮/雪蓮花) ● Plant voucher specimen
Herba Saussureae Involucratae (天山雪蓮/雪蓮花) (number of specimens / locality)	● 5 / Hejing County, Xinjiang Uygur Autonomous Region, China ● 6 / Huocheng County, Xinjiang Uygur Autonomous Region, China ● 5 / Jimsar County, Xinjiang Uygur Autonomous Region, China
Plant voucher specimen (number of specimens / locality)	● 2 / Hejing County, Xinjiang Uygur Autonomous Region, China ● 1 / Huocheng County, Xinjiang Uygur Autonomous Region, China ● 1 / Jimsar County, Xinjiang Uygur Autonomous Region, China

Total number of specimen	● 20
Specimen source	● Hong Kong Chinese Materia Medica Standards (HKCMMS) Project
Method for data generation	● GCMTI RD-5:2020
Length of DNA barcode	● Nuclear internal transcribed spacer 2 (ITS2) is 223 bp ● Chloroplast <i>psbA-trnH</i> intergenic spacer (<i>psbA-trnH</i>) is 463–464 bp ● Chloroplast ribulose biphosphate carboxylase large chain (<i>rbcL</i>) is 553 bp

Reference DNA Sequence

Plant Specimen

DNA Information

Internal transcribed spacer 2 of nuclear ribosomal RNA (ITS2)

Batch ID. BI210323

>RD675-1B ITS2

CGCATCGCGTCGCCCCAACCACGCCTCCCTCATGGG
GATGTGTTTTGTTTGGGGCGGAGAATGGTCTCCCGTG
CTCATGGTGCGTTGGCCTAAAAAGGAGYCCCCCTTCG
ACGGACGCACGGCTAGTGGTGGTTTTCAAGGCCTTCG
TATCGAGCTGTGCATACGTGACGGAATCGCTCTCCAA
AGACCCCAACGTGTCGTCTTGCGACGACGCTTCGACC
G

Remarks: observations at nucleotide position 103

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

Batch ID. BI210323

>RD675-1B *psbA-trnH*

ATAATTTCCCTCTAGACTTAGCTGCTATCGAAGCTCCA
TCTACAAATGGATAAGACTTTGGTCTGATTGTATAGG
AGTTTTTGAACATAAAAAAGGAGCAATAGCTTCCCTCT
TGTTTTATCAAGAGGGCGTTATTGCTCCTTTTTTTATT
TAGTAGTATTACCTTACATAGTTTCTTAAAAATAAC
AAGGGGGTTTTATAGTTTGGTTCGATTAGCGTGTTTTA
TCTTTGTATTAATTTATATTATAGGTTTATATATCCTTT
TCCAATCGTTTATGAAGTTTATTTCCAACCTCAATTT
CAATCTAAAATAGATAAAAAATTATAATTTTGATTATT
TATTGCTTTTATTTTCAAGAAATAAGAAATAAATTATAT
GCTTTTTTTTATGTTAATGGAAAAATAAAATATAGTA
GATAATACTAGATAATAGGGGCGGATGTAGCCAAGT
GGATCAAGGCAGT

Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BI210323

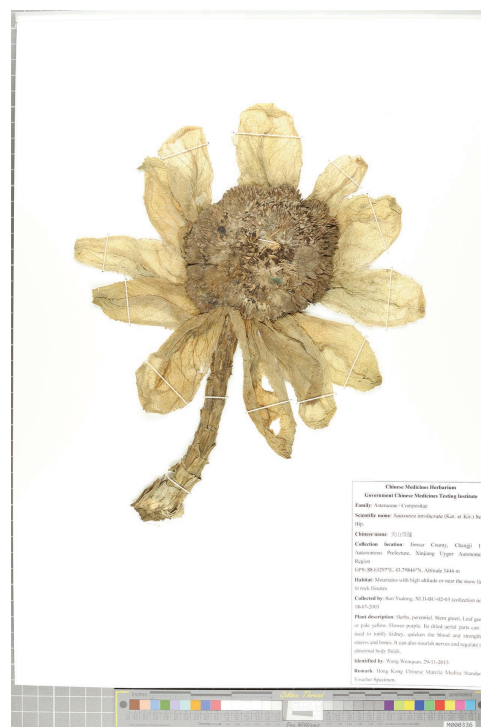
>RD675-1B *rbcL*

AAGTGTGGATTCAAAGCTGGTGTAAAGATTATAAA
TTGACTTATTATACCTCTGACTATAAAACCAAGGATA
CTGATATCTTGGCAGCATTTCGAGTAACCTCAACCT
GGAGTTCCGCCTGAAGAAGCAGGGGCCGAGTAGCT
GCCGAATCTTCTACTGGTACATGGACAACCTGTGTGGA
CCGATGGACTTACGAGCCTTGATCGTTACAAAGGGCG
ATGCTATGGAATCGAGCCTGTTCTGGAGAAGAAAGT
CAATTTATTGCTTATGTAGCTTACCCATTAGACCTTT
TGAAGAAGGTTCTGTTACTAACATGTTTACTTCCATTG
TAGGTAATGTATTTGGGTTCAAAGCCCTGCGTGCTCT
ACGCTTGGAAGATTGCGAATCCCTACTGCGTATGTT
AAAACCTTTCCAAGGTCCGCCTCACGGCATCCAAGTTG
AGAGAGATAAATTGAACAAGTATGGTCGTCCCTGTT
GGGATGTACTATTAAACCTAAATTGGGGTTATCCGCT
AAAAACTACGGTAGAGCTGTTTATGAATGTCTT

Reference Detail

Description of reference material	Plant specimen
Scientific name	<i>Saussurea involucrata</i> Kar. et Kir.
Laboratory number	RD675
Sample mark	RD675-1B
Locality	Jimsar County, Xinjiang Uygur Autonomous Region, China
Corresponding CMM	RD706
Authenticated	Yes
Remarks	ITS2: 103Y

Image



Reference DNA Sequence

Plant Specimen

DNA Information

Internal transcribed spacer 2 of nuclear ribosomal RNA (ITS2)

Batch ID. BI210323

>RD676-1B ITS2

CGCATCGCGTCGCCCCCAACCACGCCTCCCTCATGGG
GATGTGTTTTGTTTGGGGCGGAGAATGGTCTCCCGTG
CTCATGGTGCGTTTGGCCTAAAAAGGAGTCCCCTTCG
ACGGACGCACGGCTAGTGGTGGTTTTCAAGGCCTTCG
TATCGAGCTGTGCATACGTGACGGAATCGCTCTCCAA
AGACCCCAACGTGTCGTCTTGCGACGACGCTTCGACC
G

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

Batch ID. BI210323

>RD676-1B *psbA-trnH*

ATAATTTCCCTCTAGACTTAGCTGCTATCGAAGCTCCA
TCTACAAATGGATAAGACTTTGGTCTGATTGTATAGG
AGTTTTTGAAGTAAAAAGGAGCAATAGCTTCCCTCT
TGTTTTATCAAGAGGGCGTTATTGCTCCTTTTTTATT
TAGTAGTATTACCTTACATAGTTTCTTTAAAAATAAC
AAGGGGGTTTTATAGTTTGGTTCGATTAGCGTGTTTTA
TCTTTGTATTAATTTATATTATAGGTTTATATATCCTTT
TCCCAATCGTTTATGAAGTTTATTTCCAACTCAATT
CAATCTAAAATAGATAAAAAATTATAATTTGATTATT
TATTGCTTTATTTCAGAAATAAGAAATAAATTATAT
GCTTTTTTTTATGTTAATGGAAAAATAAATATAGTA
GATAATACTAGATAATAGGGGCGGATGTAGCCAAGT
GGATCAAGGCAGT

Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BI210323

>RD676-1B *rbcL*

AAGTGTTGGATTCAAAGCTGGTGTAAAGATTATAAA
TTGACTTATTATACTCTGACTATAAAACCAAGGATA
CTGATATCTTGGCAGCATTTCGAGTAACCTCAACCT
GGAGTTCCGCCCTGAAGAAGCAGGGGCCGAGTAGCT
GCCGAATCTTCTACTGGTACATGGACAACCTGTGTGGA
CCGATGGACTTACGAGCCTTGATCGTTACAAAGGGCG
ATGCTATGGAATCGAGCCTGTTCTGGAGAAGAAAGT
CAATTTATTGCTTATGTAGCTTACCCATTAGACCTTTT
TGAAGAAGGTTCTGTACTAACATGTTTACTTCCATTG
TAGGTAATGTATTGCGTTCAAAGCCCTGCGTGCTCT
ACGTCTGGAAGATTTGCGAATCCCTACTGCGTATGTT
AAAACCTTCCAAGGTCCGCCTCACGGCATCCAAGTTG
AGAGAGATAAATTGAACAAGTATGGTCGTCCCCTGTT
GGGATGTACTATTAAACCTAAATTGGGGGTTATCCGCT
AAAAACTACGGTAGAGCTGTTTATGAATGTCTT

Reference Detail

Description of reference material	Plant specimen
Scientific name	<i>Saussurea involucrata</i> Kar. et Kir.
Laboratory number	RD676
Sample mark	RD676-1B
Locality	Huocheng County, Xinjiang Uygur Autonomous Region, China
Corresponding CMM	RD707
Authenticated	Yes
Remarks	-

Image



Reference DNA Sequence

Plant Specimen

DNA Information

Internal transcribed spacer 2 of nuclear ribosomal RNA (ITS2)

Batch ID. BI210323

>RD677-1A ITS2

CGCATCGCGTCGCCCCAACCACGCCTCCCTCATGGG
GATGTGTTTTGTTTGGGGCGGAGAAATGGTCTCCCGTG
CTCATGGTGCGGTTGGCCTAAAAAGGAGTCCCCTTCG
ACGGACGCACGGCTAGTGGTGGTTTTCAAGGCCTTCG
TATCGAGCTGTGCATACGTGACGGAATCGCTCTCCAA
AGACCCCAACGTGTCGTCTTGCGACGACGCTTCGACC
G

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

Batch ID. BI210323

>RD677-1A_psbA-trnH

ATAATTTCCCTCTAGACTTAGCTGCTATCGAAGCTCCA
TCTACAAATGGATAAGACTTTGGTCTGATTGTATAGG
AGTTTTTGAACATAAAAAAGGAGCAATAGCTTCCCTCT
TGTTTTATCAAGAGGGCGTTATTGCTCCTTTTTTATT
TAGTAGTATTACCTTACATAGTTTCTTTAAAAATAAC
AAGGGGGTTTTATAGTTTGGTTCGATTAGCGTGTTTTA
TCTTTGTATTAATTTATATTATAGGTTTATATATCCCTT
TCCCAATCGTTTATGAAGTTTATTTCCAACTCAATTT
CAATCTAAAATAGATAAAAAATTATAATTTTGATTATT
TATTGCTTTTATTTCAGAAATAAGAAATAAATTATAT
GCTTTTTTTTATGTTAATGGAATAAATAATATAGTA
GATAATACTAGATAATAGGGGCGGATGTAGCCAAGT
GGATCAAGGCAGT

Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BI210323

>RD677-1A_rbcL

AAGTGTTGGATTCAAAGCTGGTGTAAAGATTATAAA
TTGACTTATTATACTCTGACTATAAAACCAAGGATA
CTGATATCTTGGCAGCATTTCGAGTAACCTCAACCT
GGAGTTCGCGCTGAAGAAGCAGGGGCCGAGTAGCT
GCCGAATCTTCTACTGGTACATGGACAACCTGTGTGGA
CCGATGGACTTACGAGCCTTGATCGTTACAAAGGGCG
ATGCTATGGAATCGAGCCTGTTCTGGAGAAGAAAGT
CAATTTATTGCTTATGTAGCTTACCCATTAGACCTTTT
TGAAGAAGGTTCTGTACTAACATGTTTACTTCCATTG
TAGGTAATGTATTGCGGTTCAAAGCCCTGCGTGCTCT
ACGTCTGGAAGATTTGCGAATCCCTACTGCGTATGTT
AAAACCTTCCAAGGTCCGCTCACGGCATCCAAGTTG
AGAGAGATAAATTGAACAAGTATGGTCGTCCCCTGTT
GGGATGTACTATTAAACCTAAATTGGGGGTTATCCGCT
AAAAACTACGGTAGAGCTGTTTATGAATGTCTT

Reference Detail

Description of reference material	Plant specimen
Scientific name	<i>Saussurea involucrata</i> Kar. et Kir.
Laboratory number	RD677
Sample mark	RD677-1A
Locality	Hejing County, Xinjiang Uygur Autonomous Region, China
Corresponding CMM	RD705
Authenticated	Yes
Remarks	-

Image



Reference DNA Sequence

Plant Specimen

DNA Information

Internal transcribed spacer 2 of nuclear ribosomal RNA (ITS2)

Batch ID. BI210323

>RD678-1A ITS2

CGCATCGCGTCGCCCCAACCACGCCTCCCTCATGGG
GATGTGTTTTGTTTGGGGCGGAGAAATGGTCTCCCGTG
CTCATGGTGCGGTTGGCCTAAAAAGGAGTCCCCTTCG
ACGGACGCACGGCTAGTGGTGGTTTTCAAGGCCTTCG
TATCGAGCTGTGCATACGTGACGGAATCGCTCTCCAA
AGACCCCAACGTGTCGTCTTGCGACGACGCTTCGACC
G

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

Batch ID. BI210323

>RD678-1A_psbA-trnH

ATAATTTCCCTCTAGACTTAGCTGCTATCGAAGCTCCA
TCTACAAATGGATAAGACTTTGGTCTGATTGTATAGG
AGTTTTTGAAGTAAAAAGGAGCAATAGCTTCCCTCT
TGTTTTATCAAGAGGGCGTTATTGCTCCTTTTTTATT
TAGTAGTATTACCTTACATAGTTTCTTTAAAAATAAC
AAGGGGGTTTTATAGTTTGGTTCGATTAGCGTGTTTTA
TCTTTGTATTAATTTATATTATAGGTTATATATCCTTT
TCCCAATCGTTTATGAAGTTTATTTCCAACTCAATT
CAATCTAAAATAGATAAAAAATTATAATTTGATTATT
TATTGCTTTATTTCAGAAATAAGAAATAAATTATAT
GCTTTTTTTTATGTTAATGGAATAAATAATATAGTA
GATAATACTAGATAATAGGGGCGGATGTAGCCAAGT
GGATCAAGGCAGT

Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BI210323

>RD678-1A_rbcL

AAGTGTTGGATTCAAAGCTGGTGTAAAGATTATAAA
TTGACTTATTATACTCTGACTATAAAACCAAGGATA
CTGATATCTTGGCAGCATTTCGAGTAACCTCAACCT
GGAGTTCGCGCTGAAGAAGCAGGGGCCGAGTAGCT
GCCGAATCTTCTACTGGTACATGGACAACCTGTGTGGA
CCGATGGACTTACGAGCCTTGATCGTTACAAAGGGCG
ATGCTATGGAATCGAGCCTGTTCTGGAGAAGAAAGT
CAATTTATTGCTTATGTAGCTTACCCATTAGACCTTTT
TGAAGAAGGTTCTGTACTAACATGTTTACTTCCATTG
TAGGTAATGTATTGCGGTTCAAAGCCCTGCGTGCTCT
ACGTCTGGAAGATTTGCGAATCCCTACTGCGTATGTT
AAAACCTTCCAAGGTCCGCTCACGGCATCCAAGTTG
AGAGAGATAAATTGAACAAGTATGGTCGTCCTCGTT
GGGATGTACTATTAAACCTAAATTGGGGGTTATCCGCT
AAAAACTACGGTAGAGCTGTTTATGAATGTCTT

Reference Detail

Description of reference material	Plant specimen
Scientific name	<i>Saussurea involucrata</i> Kar. et Kir.
Laboratory number	RD678
Sample mark	RD678-1A
Locality	Hejing County, Xinjiang Uygur Autonomous Region, China
Corresponding CMM	RD705
Authenticated	Yes
Remarks	-

Image



Reference DNA Sequence

Chinese Materia Medica (CMM)

DNA Information

Internal transcribed spacer 2 of nuclear ribosomal RNA (ITS2)

Batch ID. BI210209

>RD705-1B ITS2

CGCATCGCGTCGCCCCAACCACGCCTCCCTCATGGG
GATGTGTTTTGTTTGGGGCGGAGAAATGGTCTCCCGTG
CTCATGGTGCGTTTGGCCTAAAAAGGAGCCCCCTTCG
ACGGACGCACGGCTAGTGGTGGTTTTCAAGGCCTTCG
TATCGAGCTGTGCATACGTGACGGAATCGCTCTCCAA
AGACCCCAACGTGTCGTCTTGCGACGACGCTTCGACC
G

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

Batch ID. BI210209

>RD705-1B_psbA-trnH

ATAATTTCCCTCTAGACTTAGCTGCTATCGAAGCTCCA
TCTACAAATGGATAAGACTTTGGTCTGATTGTATAGG
AGTTTTTGAACATAAAAAAGGAGCAATAGCTTCCCTCT
TGTTTTATCAAGAGGGCGTTATTGCTCCTTTTTTATT
TAGTAGTATTTACCTTACATAGTTTCTTTAAAAATAAC
AAGGGGGTTTTATAGTTTGGTTCGATTAGCGTGTTTTA
TCTTTGTATTAATTTATATTATAGGTTTATATATCCTTT
TCCCAATCGTTTATGAAGTTTATTTCCAACTCAATTT
CAATCTAAAATAGATAAAAAATTATAATTTTGATTATT
TATTGCTTTTATTTCAGAAATAAGAAATAAATTATAT
GCTTTTTTTTATGTTAATGGAATAAATAATATAGTA
GATAATACTAGATAATAGGGGCGGATGTAGCCAAGT
GGATCAAGGCAGT

Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BI210209

>RD705-1B_rbcL

AAAGTGTGGATTCAAAGCTGGTGTAAAGATTATAAA
TTGACTTATTATACTCTGACTATAAAACCAAGGATA
CTGATATCTTGGCAGCATTTCGAGTAACCTCAACCT
GGAGTTCCGCCTGAAGAAGCAGGGGCCGAGTAGCT
GCCGAATCTTCTACTGGTACATGGACAACGTGTGGGA
CCGATGGACTTACGAGCCTTGATCGTTACAAAGGGCG
ATGCTATGGAATCGAGCCTGTTCTGGAGAAGAAAGT
CAATTTATTGCTTATGTAGCTTACCCATTAGACCTTTT
TGAAGAAGGTTCTGTACTAACATGTTTACTTCCATTG
TAGGTAATGTATTGGGTTCAAAGCCCTGCGTGCTCT
ACGTCTGGAAGATTGCGAATCCCTACTGCGTATGTT
AAAACCTTCCAAGGTCCGCCTCACGGCATCCAAGTTG
AGAGAGATAAATTGAACAAGTATGGTCGTCCCCTGTT
GGGATGTACTATTAAACCTAAATTGGGGTTATCCGCT
AAAAACTACGGTAGAGCTGTTTATGAATGTCTT

Reference Detail

Description of reference material	Herba Saussureae Involucratae
Scientific name	<i>Saussurea involucrata</i> Kar. et Kir.
Laboratory number	RD705
Sample mark	RD705-1B
Locality	Hejing County, Xinjiang Uygur Autonomous Region, China
Corresponding voucher specimen	RD677, RD678
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. BI210209

>RD705-2B ITS2

CGCATCGCGTCGCCCCAACCACGCCTCCCTCATGGG
GATGTGTTTTGTTTGGGGCGGAGAAATGGTCTCCCGTG
CTCATGGTGCGTTTGGCCTAAAAAGGAGCCCCCTTCG
ACGGACGCACGGCTAGTGGTGGTTTTCAAGGCCTTCG
TATCGAGCTGTGCATACGTGACGGAATCGCTCTCCAA
AGACCCCAACGTGTCGTCTTGCGACGACGCTTCGACC
G

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

Batch ID. BI210209

>RD705-2B_psbA-trnH

ATAATTTCCCTCTAGACTTAGCTGCTATCGAAGCTCCA
TCTACAAATGGATAAGACTTTGGTCTGATTGTATAGG
AGTTTTTGAATAAAAAAGGAGCAATAGCTTCCCTCT
TGTTTTATCAAGAGGGCGTTATTGCTCCTTTTTTATT
TAGTAGTATTACCTTACATAGTTTCTTTAAAAATAAC
AAGGGGGTTTTATAGTTTGGTTCGATTAGCGTGTTTTA
TCTTTGTATTAATTTATATTATAGGTTTATATATCCTTT
TCCCAATCGTTTATGAAGTTTATTTCCTCAACTCAATT
CAATCTAAAATAGATAAAAAATTATAATTTTGATTATT
TATTGCTTTTATTTCAGAAATAAGAAATAAATTATAT
GCTTTTTTTTATGTTAATGGAATAAATAAATATAGTA
GATAATACTAGATAATAGGGGCGGATGTAGCCAAGT
GGATCAAGGCAGT

Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BI210209

>RD705-2B_rbcL

AAAGTGTGGATTCAAAGCTGGTGTAAAGATTATAAA
TTGACTTATTATACTCTGACTATAAAACCAAGGATA
CTGATATCTTGGCAGCATTTCGAGTAACCTCAACCT
GGAGTTCCGCCTGAAGAAGCAGGGGCCGCGAGTAGCT
GCCGAATCTTCTACTGGTACATGGACAACGTGTGGGA
CCGATGGACTTACGAGCCTTGATCGTTACAAAGGGCG
ATGCTATGGAATCGAGCCTGTTCTGGAGAAGAAAGT
CAATTTATTGCTTATGTAGCTTACCCATTAGACCTTTT
TGAAGAAGGTTCTGTACTAACATGTTTACTTCCATTG
TAGGTAATGTATTGGGTTCAAAGCCCTGCGTGCTCT
ACGTCTGGAAGATTGCGAATCCCTACTGCGTATGTT
AAAACCTTCCAAGGTCCGCCTCACGGCATCCAAGTTG
AGAGAGATAAATTGAACAAGTATGGTCGTCCCCTGTT
GGGATGTACTATTAAACCTAAATTGGGGTTATCCGCT
AAAAACTACGGTAGAGCTGTTTATGAATGTCTT

Reference Detail

Description of reference material	Herba Saussureae Involucratae
Scientific name	<i>Saussurea involucrata</i> Kar. et Kir.
Laboratory number	RD705
Sample mark	RD705-2B
Locality	Hejing County, Xinjiang Uygur Autonomous Region, China
Corresponding voucher specimen	RD677, RD678
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. BI211019-2

>RD705-3A ITS2

CGCATCGCGTCGCCCCAACCACGCCTCCCTCATGGG
GATGTGTTTTGTTTGGGGCGGAGAAATGGTCTCCCGTG
CTCATGGTGCGGTTGGCCTAAAAAGGAGCCCCCTTCG
ACGGACGCACGGCTAGTGGTGGTTTTCAAGGCCTTCG
TATCGAGCTGTGCATACGTGACGGAATCGCTCTCCAA
AGACCCCAACGTGTCGTCTTGCGACGACGCTTCGACC
G

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

Batch ID. BI211019-2

>RD705-3A_psbA-trnH

ATAATTTCCCTCTAGACTTAGCTGCTATCGAAGCTCCA
TCTACAAATGGATAAGACTTTGGTCTGATTGTATAGG
AGTTTTTGAATAAAAAAGGAGCAATAGCTTCCCTCT
TGTTTTATCAAGAGGGCGTTATTGCTCCTTTTTTATT
TAGTAGTATTACCTTACATAGTTTCTTAAAAATAAC
AAGGGGGTTTTATAGTTTGGTTCGATTAGCGTGTTTTA
TCTTTGTATTAATTTATATTATAGGTTTATATATCCTT
TCCCAATCGTTTATGAAGTTTATTTCCAACTCAATT
CAATCTAAAATAGATAAAAAATTATAATTTGATTATT
TATTGCTTTATTTCAGAAATAAGAAATAAATTATAT
GCTTTTTTTTATGTTAATGGAATAAATAATATAGTA
GATAATACTAGATAATAGGGGCGGATGTAGCCAAGT
GGATCAAGGCAGK

Remarks: observations at nucleotide position 464

Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BI211019-2

>RD705-3A_rbcL

AAGTGTGGATTCAAAGCTGGTGTAAAGATTATAAA
TTGACTTATTATACTCCTGACTATAAAACCAAGGATA
CTGATATCTTGGCAGCATTTCGAGTAACCTCCTCAACCT
GGAGTTCCGCCTGAAGAAGCAGGGGCCGAGTAGCT
GCCGAATCTTCTACTGGTACATGGACAACCTGTGTGGA
CCGATGGACTTACGAGCCTTGATCGTTACAAAGGGCG
ATGCTATGGAATCGAGCCTGTTCTGGAGAAGAAAGT
CAATTTATTGCTTATGTAGCTTACCCATTAGACCTTT
TGAAGAAGGTTCTGTTACTAACATGTTTACTTCCATTG
TAGGTAATGTATTTGGGTTCAAAGCCCTGCGTGCTCT
ACGCTCTGGAAGATTGCGAATCCCTACTGCGTATGTT
AAAACCTTTCCAAGGTCCGCTCACGGCATCCAAGTTG
AGAGAGATAAATTGAACAAGTATGGTCGTCCCCTGTT
GGGATGTACTATTAAACCTAAATTGGGGTTATCCGCT
AAAAACTACGGTAGAGCTGTTTATGAATGTCTT

Reference Detail

Description of reference material	Herba Saussureae Involucratae
Scientific name	<i>Saussurea involucrata</i> Kar. et Kir.
Laboratory number	RD705
Sample mark	RD705-3A
Locality	Hejing County, Xinjiang Uygur Autonomous Region, China
Corresponding voucher specimen	RD677, RD678
Authenticated	Yes
Remarks	psbA-trnH: 464K

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. BI211019-2

>RD705-4A ITS2

CGCATCGCGTCGCCCAACACGCCTCCCTCATGGG
GATGTGTTTTGTTTGGGGCGGAGAAATGGTCTCCCGTG
CTCATGGTGCGGTTGGCCTAAAAAGGAGCCCCCTTCG
ACGGACGCACGGCTAGTGGTGGTTTTCAAGGCCTTCG
TATCGAGCTGTGCATACGTGACGGAATCGCTCTCCAA
AGACCCCAACGTGTCGTCTTGCGACGACGCTTCGACC
G

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

Batch ID. BI211019-2

>RD705-4A *psbA-trnH*

ATAATTTCCCTCTAGACTTAGCTGCTATCGAAGCTCCA
TCTACAAATGGATAAGACTTTGGTCTGATTGTATAGG
AGTTTTTGAATAAAAAAGGAGCAATAGCTTCCCTCT
TGTTTTATCAAGAGGGCGTTATTGCTCCTTTTTTATT
TAGTAGTATTACCTTACATAGTTTCTTAAAAATAAC
AAGGGGGTTTTATAGTTTGGTTCGATTAGCGTGTTTTA
TCTTTGTATTAATTTATATTATAGGTTATATATATCCTT
TCCCAATCGTTTATGAAGTTTATTTCCAACTCAATT
CAATCTAAAATAGATAAAAAATTATAATTTGATTATT
TATTGCTTTTATTTCAGAAATAAGAAATAAATTATAT
GCTTTTTTTTATGTTAATGGAATAAATAATATAGTA
GATAATACTAGATAATAGGGGCGGATGTAGCCAAGT
GGATCAAGGCAGK

Remarks: observations at nucleotide position 464

Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BI211019-2

>RD705-4A *rbcL*

AAGTGTGGATTCAAAGCTGGTGTAAAGATTATAAA
TTGACTTATTATACTCCTGACTATAAAACCAAGGATA
CTGATATCTTGGCAGCATTTCGAGTAACCTCAACCT
GGAGTTCGCGCTGAAGAAGCAGGGGCCGAGTAGCT
GCCGAATCTTCTACTGGTACATGGACAACGTGTGGGA
CCGATGGACTTACGAGCCTTGATCGTTACAAAGGGCG
ATGCTATGGAATCGAGCCTGTTCTGGAGAAGAAAGT
CAATTTATTGCTTATGTAGCTTACCCATTAGACCTTT
TGAAGAAGGTTCTGTTACTAACATGTTTACTTCCATTG
TAGGTAATGTATTTGGGTTCAAAGCCCTGCGTGCTCT
ACGCTCTGGAAGATTGCGAATCCCTACTGCGTATGTT
AAAACCTTTCCAAGGTCCGCTCACGGCATCCAAGTTG
AGAGAGATAAATTGAACAAGTATGGTCGTCCCCTGTT
GGGATGTACTATTAAACCTAAATTGGGGTTATCCGCT
AAAAACTACGGTAGAGCTGTTTATGAATGTCTT

Reference Detail

Description of reference material	Herba Saussureae Involucratae
Scientific name	<i>Saussurea involucrata</i> Kar. et Kir.
Laboratory number	RD705
Sample mark	RD705-4A
Locality	Hejing County, Xinjiang Uygur Autonomous Region, China
Corresponding voucher specimen	RD677, RD678
Authenticated	Yes
Remarks	<i>psbA-trnH</i> : 464K

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. BI211019-2

>RD705-5A ITS2

CGCATCGCGTCGCCCCAACCACGCCTCCCTCATGGG
GATGTGTTTTGTTTGGGGCGGAGAAATGGTCTCCCGTG
CTCATGGTGCGTTTGGCCTAAAAAGGAGCCCCCTTCG
ACGGACGCACGGCTAGTGGTGGTTTTCAAGGCCTTCG
TATCGAGCTGTGCATACGTGACGGAATCGCTCTCCAA
AGACCCCAACGTGTCGTCTTGCGACGACGCTTCGACC
G

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

Batch ID. BI211019-2

>RD705-5A *psbA-trnH*

ATAATTTCCCTCTAGACTTAGCTGCTATCGAAGCTCCA
TCTACAAATGGATAAGACTTTGGTCTGATTGTATAGG
AGTTTTTGAAGTAAAAAGGAGCAATAGCTTCCCTCT
TGTTTTATCAAGAGGGCGTTATTGCTCCTTTTTTATT
TAGTAGTATTACCTTACATAGTTTCTTTAAAAATAAC
AAGGGGGTTTTATAGTTTGGTTCGATTAGCGTGTTTTA
TCTTTGTATTAATTTATATTATAGGTTTATATATCCTTT
TCCCAATCGTTTATGAAGTTTATTTCCAACTCAATT
CAATCTAAAATAGATAAAAAATTATAATTTGATTATT
TATTGCTTTATTTCAGAAATAAGAAATAAATTATAT
GCTTTTTTTTATGTTAATGGAATAAATAATATAGTA
GATAATACTAGATAATAGGGGCGGATGTAGCCAAGT
GGATCAAGGCAGT

Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BI211019-2

>RD705-5A *rbcL*

AAAGTGTGGATTCAAAGCTGGTGTAAAGATTATAAA
TTGACTTATTATACTCTGACTATAAAACCAAGGATA
CTGATATCTTGGCAGCATTTCGAGTAACTCCTCAACCT
GGAGTTCCGCCTGAAGAAGCAGGGGCCGAGTAGCT
GCCGAATCTTCTACTGGTACATGGACAACGTGTGGGA
CCGATGGACTTACGAGCCTTGATCGTTACAAAGGGCG
ATGCTATGGAATCGAGCCTGTTCTGGAGAAGAAAGT
CAATTTATTGCTTATGTAGCTTACCCATTAGACCTTTT
TGAAGAAGGTTCTGTACTAACATGTTTACTTCCATTG
TAGGTAATGTATTGGGTTCAAAGCCCTGCGTGCTCT
ACGTCTGGAAGATTGCGAATCCCTACTGCGTATGTT
AAAACCTTCCAAGGTCCGCCTCACGGCATCCAAGTTG
AGAGAGATAAATTGAACAAGTATGGTCGTCCCGCTGTT
GGGATGTACTATTAAACCTAAATTGGGGTTATCCGCT
AAAAACTACGGTAGAGCTGTTTATGAATGTCTT

Reference Detail

Description of reference material	Herba Saussureae Involucratae
Scientific name	<i>Saussurea involucrata</i> Kar. et Kir.
Laboratory number	RD705
Sample mark	RD705-5A
Locality	Hejing County, Xinjiang Uygur Autonomous Region, China
Corresponding voucher specimen	RD677, RD678
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. BI210209

>RD706-1A ITS2

CGCATCGCGTCGCCCCAACCACGCCTCCCTCATGGG
GATGTGTTTTGTTTGGGGCGGAGAAATGGTCTCCCGTG
CTCATGGTGCGGTTGGCCTAAAAAGGAGCCCCCTTCG
ACGGACGCACGGCTAGTGGTGGTTTTCAAGGCCTTCG
TATCGAGCTGTGCATACGTGACGGAATCGCTCTCCAA
AGACCCCAACGTGTCGTCTTGCGACGACGCTTCGACC
G

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

Batch ID. BI210209

>RD706-1A_psbA-trnH

ATAATTTCCCTCTAGACTTAGCTGCTATCGAAGCTCCA
TYTACAAATGGATAAGACTTTGGTCTGATTGTATAGG
AGTTTTTGAATAAAAAAGGAGCAATAGCTTCCCTCT
TGTTTTATCAAGAGGGCGTTATTGCTCCTTTTTTATT
TAGTAGTATTACCTTACATAGTTTCTTTAAAAATAAC
AAGGGGGTTTTATAGTTTGGTTCGATTAGCGTGTTTTA
TCTTTGTATTAATTTATATTATAGGTTATATATATCCTT
TCCCAATCGTTTATGAAGTTTATTTCCAACTCAATT
CAATCTAAAATAGATAAAAAATTATAATTTGATTATT
TATTGCTTTTATTTCAGAAATAAGAAATAAATTATAT
GCTTTTTTTTTATGTTAATGGAATAAATAATATAGTA
GATAATACTAGATAATAGGGGCGGATGTAGCCAAGT
GGATCAAGGCAGK

Remarks: observations at nucleotide position 40, 464

Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BI210209

>RD706-1A_rbcL

AAGTGTGGATTCAAAGCTGGTGTAAAGATTATAAA
TTGACTTATTATACTCCTGACTATAAAACCAAGGATA
CTGATATCTTGGCAGCATTTCGAGTAACCTCCTCAACCT
GGAGTTCCGCCTGAAGAAGCAGGGGCCGAGTAGCT
GCCGAATCTTCTACTGGTACATGGACAACCTGTGTGGA
CCGATGGACTTACGAGCCTTGATCGTTACAAAGGGCG
ATGCTATGGAATCGAGCCTGTTCTGGAGAAGAAAGT
CAATTTATTGCTTATGTAGCTTACCCATTAGACCTTT
TGAAGAAGGTTCTGTTACTAACATGTTTACTTCCATTG
TAGGTAATGTATTTGGGTTCAAAGCCCTGCGTGCTCT
ACGCTCTGGAAGATTGCGAATCCCTACTGCGTATGTT
AAAACCTTTCCAAGGTCCGCCTCACGGCATCCAAGTTG
AGAGAGATAAATTGAACAAGTATGGTCGTCCCCTGTT
GGGATGTACTATTAAACCTAAATTGGGGTTATCCGCT
AAAAACTACGGTAGAGCTGTTTATGAATGTCTT

Reference Detail

Description of reference material	Herba Saussureae Involucratae
Scientific name	<i>Saussurea involucrata</i> Kar. et Kir.
Laboratory number	RD706
Sample mark	RD706-1A
Locality	Jimsar County, Xinjiang Uygur Autonomous Region, China
Corresponding voucher specimen	RD675
Authenticated	Yes
Remarks	psbA-trnH: 40Y, 464K

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. BI210209

>RD706-2B ITS2

CGCATCGCGTCGCCCCAACCACGCCTCCCTCATGGG
GATGTGTTTTGTTTGGGGCGGAGAATGGTCTCCCGTG
CTCATGGTGCGTTGGCCTAAAAAGGAGYCCCCCTTCG
ACGGACGCACGGCTAGTGGTGGTTTTCAAGGCCTTCG
TATCGAGCTGTGCATACGTGACGGAATCGCTCTCCAA
AGACCCCAACGTGTCGTCTTGCGACGACGCTTCGACC
G

Remarks: observations at nucleotide position 103

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

Batch ID. BI210209

>RD706-2B *psbA-trnH*

ATAATTTCCCTCTAGACTTAGCTGCTATCGAAGCTCCA
TCTACAAATGGATAAGACTTTGGTCTGATTGTATAGG
AGTTTTTGAATAAAAAAGGAGCAATAGCTTCCCTCT
TGTTTTATCAAGAGGGCGTTATTGCTCCTTTTTTATT
TAGTAGTATTACCTTACATAGTTTCTTAAAAATAAC
AAGGGGGTTTTATAGTTTGGTTTCGATTAGCGTGTTTTA
TCTTTGTATTAATTTATATTATAGGTTTATATCCTTT
TCCCAATCGTTATGAAGTTTATTTCCAACCTCAATTT
CAATCTAAAATAGATAAAAAATTATAATTTTGATTATT
TATTGCTTTTATTTTCAGAAAATAAGAAATAAATTATAT
GCTTTTTTTTTATGTTAATGGAAAAATAAAATATAGTA
GATAATACTAGATAATAGGGGCGGATGTAGCCAAGT
GGATCAAGGCAGT

Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BI210209

>RD706-2B *rbcL*

AAGTGTGGATTCAAAGCTGGTGTAAAGATTATAAA
TTGACTTATTATACTCCTGACTATAAAACCAAGGATA
CTGATATCTTGGCAGCATTTCGAGTAACCTCCTCAACCT
GGAGTTCCGCCTGAAGAAGCAGGGGCCGAGTAGCT
GCCGAATCTTCTACTGGTACATGGACAACCTGTGTGGA
CCGATGGACTTACGAGCCTTGATCGTTACAAAGGGCG
ATGCTATGGAATCGAGCCTGTTCTGGAGAAGAAAGT
CAATTTATTGCTTATGTAGCTTACCCATTAGACCTTT
TGAAGAAGGTTCTGTTACTAACATGTTTACTTCCATTG
TAGGTAATGTATTTGGGTTCAAAGCCCTGCGTGCTCT
ACGCTTGGAAGATTGCGAATCCCTACTGCGTATGTT
AAAACCTTTCCAAGGTCCGCTCACGGCATCCAAGTTG
AGAGAGATAAATTGAACAAGTATGGTCGTCCCTGTT
GGGATGTACTATTAAACCTAAATTGGGGTTATCCGCT
AAAAACTACGGTAGAGCTGTTTATGAATGTCTT

Reference Detail

Description of reference material	Herba Saussureae Involucratae
Scientific name	<i>Saussurea involucrata</i> Kar. et Kir.
Laboratory number	RD706
Sample mark	RD706-2B
Locality	Jimsar County, Xinjiang Uygur Autonomous Region, China
Corresponding voucher specimen	RD675
Authenticated	Yes
Remarks	ITS2: 103Y

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. BI211019-2

>RD706-3A ITS2

CGCATCGCGTCGCCCCAACCACGCCTCCCTCATGGG
GATGTGTTTTGTTTGGGGCGGAGAATGGTCTCCCGTG
CTCATGGTGCGTTGGCCTAAAAAGGAGYCCCCCTTCG
ACGGACGCACGGCTAGTGGTGGTTTTCAAGGCCTTCG
TATCGAGCTGTGCATACGTGACGGAATCGCTCTCCAA
AGACCCCAACGTGTCGTCTTGCGACGACGCTTCGACC
G

Remarks: observations at nucleotide position 103

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

Batch ID. BI211019-2

>RD706-3A *psbA-trnH*

ATAATTTCCCTCTAGACTTAGCTGCTATCGAAGCTCCA
TCTACAAATGGATAAGACTTTGGTCTGATTGTATAGG
AGTTTTTGAACATAAAAAAGGAGCAATAGCTTCCCTCT
TGTTTTATCAAGAGGGCGTTATTGCTCCTTTTTTATT
TAGTAGTATTACCTTACATAGTTTCTTAAAAATAAC
AAGGGGGTTTTATAGTTTGGTTCGATTAGCGTGTTTTA
TCTTTGTATTAATTTATATTATAGGTTTATATCCTTT
TCCCAATCGTTATGAAGTTTATTTCCAACCTCAATT
CAATCTAAAATAGATAAAAAATTATAATTTTGATTATT
TATTGCTTTTATTTTCAAGAAATAAGAAATAAATTATAT
GCTTTTTTTTTATGTTAATGGAAAAATAAATATAGTA
GATAATACTAGATAATAGGGGCGGATGTAGCCAAGT
GGATCAAGGCAGT

Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BI211019-2

>RD706-3A *rbcL*

AAGTGTGGATTCAAAGCTGGTGTAAAGATTATAAA
TTGACTTATTATACTCTGACTATAAAACCAAGGATA
CTGATATCTTGGCAGCATTTCGAGTAACCTCTCAACCT
GGAGTTCCGCCTGAAGAAGCAGGGGCCGAGTAGCT
GCCGAATCTTCTACTGGTACATGGACAACCTGTGTGGA
CCGATGGACTTACGAGCCTTGATCGTTACAAAGGGCG
ATGCTATGGAATCGAGCCTGTTCTGGAGAAGAAAGT
CAATTTATTGCTTATGTAGCTTACCCATTAGACCTTT
TGAAGAAGGTTCTGTTACTAACATGTTTACTTCCATTG
TAGGTAATGTATTTGGGTTCAAAGCCCTGCGTGCTCT
ACGCTCTGGAAGATTGCGAATCCCTACTGCGTATGTT
AAAACCTTTCCAAGGTCCGCCTCACGGCATCCAAGTTG
AGAGAGATAAATTGAACAAGTATGGTCGTCCCCTGTT
GGGATGTACTATTAAACCTAAATTGGGGTTATCCGCT
AAAAACTACGGTAGAGCTGTTTATGAATGTCTT

Reference Detail

Description of reference material	Herba Saussureae Involucratae
Scientific name	<i>Saussurea involucrata</i> Kar. et Kir.
Laboratory number	RD706
Sample mark	RD706-3A
Locality	Jimsar County, Xinjiang Uygur Autonomous Region, China
Corresponding voucher specimen	RD675
Authenticated	Yes
Remarks	ITS2: 103Y

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. BI211019-2

>RD706-4B ITS2

CGCATCGCGTCGCCCCAACCACGCCTCCCTCATGGG
GATGTGTTTTGTTGGGGCGGAGAATGGTCTCCCGTG
CTCATGGTGCGTTGGCCTAAAAAGGAGYCCCCCTTCG
ACGGACGCACGGCTAGTGGTGGTTTTCAAGGCCTTCG
TATCGAGCTGTGCATACGTGACGGAATCGCTCTCCAA
AGACCCCAACGTGTCGTCTTGCGACGACGCTTCGACC
G

Remarks: observations at nucleotide position 103

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

Batch ID. BI211019-2

>RD706-4B *psbA-trnH*

ATAATTTCCCTCTAGACTTAGCTGCTATCGAAGCTCCA
TCTACAAATGGATAAGACTTTGGTCTGATTGTATAGG
AGTTTTTGAATAAAAAAGGAGCAATAGCTTCCCTCT
TGTTTTATCAAGAGGGCGTTATTGCTCCTTTTTTATT
TAGTAGTATTACCTTACATAGTTTCTTAAAAATAAC
AAGGGGGTTTTATAGTTTGGTTCGATTAGCGTGTTTTA
TCTTTGTATTAATTTATATTATAGGTTTATATCCTTT
TCCAATCGTTATGAAGTTTATTTCCAACCTCAATTT
CAATCTAAAATAGATAAAAAATTATAATTTTGATTATT
TATTGCTTTTATTTTCAGAAAATAAGAAATAAATTATAT
GCTTTTTTTTTATGTTAATGGAAAAATAAAATATAGTA
GATAATACTAGATAATAGGGGCGGATGTAGCCAAGT
GGATCAAGGCAGT

Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BI211019-2

>RD706-4B *rbcL*

AAGTGTTGGATTCAAAGCTGGTGTTAAAGATTATAAA
TTGACTTATTATACTCTGACTATAAAACCAAGGATA
CTGATATCTTGGCAGCATTTCGAGTAACCTCTCAACCT
GGAGTTCCGCTGAAGAAGCAGGGGCCGAGTAGCT
GCCGAATCTTCTACTGGTACATGGACAACCTGTGTGGA
CCGATGGACTTACGAGCCTTGATCGTTACAAAGGGCG
ATGCTATGGAATCGAGCCTGTTCTGGAGAAGAAAGT
CAATTTATTGCTTATGTAGCTTACCCATTAGACCTTT
TGAAGAAGGTTCTGTTACTAACATGTTTACTTCCATTG
TAGGTAATGTATTTGGGTTCAAAGCCCTGCGTGCTCT
ACGCTTGGAAGATTGCGAATCCCTACTGCGTATGTT
AAAACCTTTCCAAGGTCCGCTCACGGCATCCAAGTTG
AGAGAGATAAATTGAACAAGTATGGTCGTCCCCTGTT
GGGATGTACTATTAAACCTAAATTGGGGTTATCCGCT
AAAAACTACGGTAGAGCTGTTTATGAATGTCTT

Reference Detail

Description of reference material	Herba Saussureae Involucratae
Scientific name	<i>Saussurea involucrata</i> Kar. et Kir.
Laboratory number	RD706
Sample mark	RD706-4B
Locality	Jimsar County, Xinjiang Uygur Autonomous Region, China
Corresponding voucher specimen	RD675
Authenticated	Yes
Remarks	ITS2: 103Y

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. BI211019-2

>RD706-5B ITS2

CGCATCGCGTCGCCCCAACCACGCCTCCCTCATGGG
GATGTGTTTTGTTGGGGCGGAGAATGGTCTCCCGTG
CTCATGGTGCGTTGGCCTAAAAAGGAGYCCCCCTTCG
ACGGACGCACGGCTAGTGGTGGTTTTCAAGGCCTTCG
TATCGAGCTGTGCATACGTGACGGAATCGCTCTCCAA
AGACCCCAACGTGTCGTCTTGCGACGACGCTTCGACC
G

Remarks: observations at nucleotide position 103

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

Batch ID. BI211019-2

>RD706-5B *psbA-trnH*

ATAATTTCCCTCTAGACTTAGCTGCTATCGAAGCTCCA
TCTACAAATGGATAAGACTTTGGTCTGATTGTATAGG
AGTTTTTGAATAAAAAAGGAGCAATAGCTTCCCTCT
TGTTTTATCAAGAGGGCGTTATTGCTCCTTTTTTATT
TAGTAGTATTACCTTACATAGTTTCTTAAAAATAAC
AAGGGGGTTTTATAGTTTGGTTTCGATTAGCGTGTTTTA
TCTTTGTATTAATTTATATTATAGGTTTATATCCTTT
TCCCAATCGTTATGAAGTTTATTTCCAACCTCAATT
CAATCTAAAATAGATAAAAAATTATAATTTTGATTATT
TATTGCTTTTATTTTCAGAAAATAAGAAATAAATTATAT
GCTTTTTTTTTATGTTAATGGAAAAATAAATATAGTA
GATAATACTAGATAATAGGGGCGGATGTAGCCAAGT
GGATCAAGGCAGT

Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BI211019-2

>RD706-5B *rbcL*

AAGTGTGGATTCAAAGCTGGTGTAAAGATTATAAA
TTGACTTATTATACTCCTGACTATAAAACCAAGGATA
CTGATATCTTGGCAGCATTTCGAGTAACCTCCTCAACCT
GGAGTTCCGCCTGAAGAAGCAGGGGCCGAGTAGCT
GCCGAATCTTCTACTGGTACATGGACAACCTGTGTGGA
CCGATGGACTTACGAGCCTTGATCGTTACAAAGGGCG
ATGCTATGGAATCGAGCCTGTTCTGGAGAAGAAAGT
CAATTTATTGCTTATGTAGCTTACCCATTAGACCTTT
TGAAGAAGGTTCTGTTACTAACATGTTTACTTCCATTG
TAGGTAATGTATTTGGGTTCAAAGCCCTGCGTGCTCT
ACGCTTGGAAGATTGCGAATCCCTACTGCGTATGTT
AAAACCTTTCCAAGGTCCGCCTCACGGCATCCAAGTTG
AGAGAGATAAATTGAACAAGTATGGTCGTCCCCTGTT
GGGATGTACTATTAAACCTAAATTGGGGTTATCCGCT
AAAAACTACGGTAGAGCTGTTTATGAATGTCTT

Reference Detail

Description of reference material	Herba Saussureae Involucratae
Scientific name	<i>Saussurea involucrata</i> Kar. et Kir.
Laboratory number	RD706
Sample mark	RD706-5B
Locality	Jimsar County, Xinjiang Uygur Autonomous Region, China
Corresponding voucher specimen	RD675
Authenticated	Yes
Remarks	ITS2: 103Y

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. BI210209

>RD707-1B ITS2

CGCATCGCGTCGCCCCAACCACGCCTCCCTCATGGG
GATGTGTTTTGTTTGGGGCGGAGAAATGGTCTCCCGTG
CTCATGGTGCGGTTGGCCTAAAAAGGAGTCCCTTCG
ACGGACGCACGGCTAGTGGTGGTTTTCAAGGCCTTCG
TATCGAGCTGTGCATACGTGACGGAATCGCTCTCCAA
AGACCCCAACGTGTCGTCTTGCGACGACGCTTCGACC
G

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

Batch ID. BI210209

>RD707-1B_psbA-trnH

ATAATTTCCCTCTAGACTTAGCTGCTATCGAAGCTCCA
TCTACAAATGGATAAGACTTTGGTCTGATTGTATAGG
AGTTTTTGAACATAAAAAAGGAGCAATAGCTTCCCTCT
TGTTTTATCAAGAGGGCGTTATTGCTCCTTTTTTATT
TAGTAGTATTACCTTACATAGTTTCTTTAAAAATAAC
AAGGGGGTTTTATAGTTTGGTTCGATTAGCGTGTTTTA
TCTTGTATTAATTTATATTATAGGTTATATATATCCTT
TCCCAATCGTTTATGAAGTTTATTTCCAACTCAATT
CAATCTAAAATAGATAAAAAATTATAATTTGATTATT
TATTGCTTTATTTCAGAAATAAGAAATAAATTATAT
GCTTTTTTTTATGTTAATGGAATAAATAATATAGTA
GATAATACTAGATAATAGGGGCGGATGTAGCCAAGT
GGATCAAGGCAGK

Remarks: observations at nucleotide position 464

Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BI210209

>RD707-1B_rbcL

AAGTGTGGATTCAAAGCTGGTGTTAAAGATTATAAA
TTGACTTATTATACTCCTGACTATAAAACCAAGGATA
CTGATATCTTGGCAGCATTTCGAGTAACCTCAACCT
GGAGTTCCGCCTGAAGAAGCAGGGGCCGAGTAGCT
GCCGAATCTTCTACTGGTACATGGACAACCTGTGTGGA
CCGATGGACTTACGAGCCTTGATCGTTACAAAGGGCG
ATGCTATGGAATCGAGCCTGTTCTGGAGAAGAAAGT
CAATTTATTGCTTATGTAGCTTACCCATTAGACCTTT
TGAAGAAGGTTCTGTTACTAACATGTTTACTTCCATTG
TAGGTAATGTATTTGGGTTCAAAGCCCTGCGTGCTCT
ACGCTCTGGAAGATTGCGAATCCCTACTGCGTATGTT
AAAACCTTTCCAAGGTCCGCTCACGGCATCCAAGTTG
AGAGAGATAAATTGAACAAGTATGGTCTGCTCCCTGTT
GGGATGTACTATTAAACCTAAATTGGGGTTATCCGCT
AAAAACTACGGTAGAGCTGTTTATGAATGTCTT

Reference Detail

Description of reference material	Herba Saussureae Involucratae
Scientific name	<i>Saussurea involucrata</i> Kar. et Kir.
Laboratory number	RD707
Sample mark	RD707-1B
Locality	Huocheng County, Xinjiang Uygur Autonomous Region, China
Corresponding voucher specimen	RD676
Authenticated	Yes
Remarks	psbA-trnH: 464K

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. BI210209

>RD707-2A ITS2

CGCATCGCGTCGCCCCAACCACGCCTCCCTCATGGG
GATGTGTTTTGTTTGGGGCGGAGAATGGTCTCCCGTG
CTCATGGTGCGGTTGGCCTAAAAAGGAGTCCCCTTCG
ACGGACGCACGGCTAGTGGTGGTTTTCAAGGCCTTCG
TATCGAGCTGTGCATACGTGACGGAATCGCTCTCCAA
AGACCCCAACGTGTCGTCTTGCGACGACGCTTCGACC
G

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

Batch ID. BI210209

>RD707-2A_psbA-trnH

ATAATTTCCCTCTAGACTTAGCTGCTATCGAAGCTCCA
TCTACAAATGGATAAGACTTTGGTCTGATTGTATAGG
AGTTTTTGAACATAAAAAAGGAGCAATAGCTTCCCTCT
TGTTTTATCAAGAGGGCGTTATTGCTCCTTTTTTATT
TAGTAGTATTACCTTACATAGTTTCTTTAAAAATAAC
AAGGGGGTTTTATAGTTTGGTTCGATTAGCGTGTTTTA
TCTTTGTATTAAATTTATATTATAGGTTTATATATCCTTT
TCCCAATCGTTTATGAAGTTTATTTCCAACTCAATTT
CAATCTAAAATAGATAAAAAATTATAATTTTGATTATT
TATTGCTTTTATTTCAGAAATAAGAAATAAATTATAT
GCTTTTTTTTTATGTTAATGGAATAAATAAATATAGTA
GATAATACTAGATAATAGGGGCGGATGTAGCCAAGT
GGATCAAGGCAGT

Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BI210209

>RD707-2A_rbcL

AAAGTGTGGATTCAAAGCTGGTGTAAAGATTATAAA
TTGACTTATTATACTCTGACTATAAAACCAAGGATA
CTGATATCTTGGCAGCATTTCGAGTAACCTCAACCT
GGAGTTCCGCCTGAAGAAGCAGGGGCCGCGAGTAGCT
GCCGAATCTTCTACTGGTACATGGACAACGTGTGGGA
CCGATGGACTTACGAGCCTTGATCGTTACAAAGGGCG
ATGCTATGGAATCGAGCCTGTTCTGGAGAAGAAAGT
CAATTTATTGCTTATGTAGCTTACCCATTAGACCTTTT
TGAAGAAGGTTCTGTACTAACATGTTTACTTCCATTG
TAGGTAATGTATTGGGTTCAAAGCCCTGCGTGCTCT
ACGTCTGGAAGATTGCGAATCCCTACTGCGTATGTT
AAAACCTTCCAAGGTCCGCCTCACGGCATCCAAGTTG
AGAGAGATAAATTGAACAAGTATGGTCGTCCCCTGTT
GGGATGTACTATTAAACCTAAATTGGGGTTATCCGCT
AAAAACTACGGTAGAGCTGTTTATGAATGTCTT

Reference Detail

Description of reference material	Herba Saussureae Involucratae
Scientific name	<i>Saussurea involucrata</i> Kar. et Kir.
Laboratory number	RD707
Sample mark	RD707-2A
Locality	Huocheng County, Xinjiang Uygur Autonomous Region, China
Corresponding voucher specimen	RD676
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. BI211019-2

>RD707-3B ITS2

CGCATCGCGTCGCCCCAACCACGCCTCCCTCATGGG
GATGTGTTTTGTTTGGGGCGGAGAATGGTCTCCCGTG
CTCATGGTGCGTTTGGCCTAAAAAGGAGTCCCCTTCG
ACGGACGCACGGCTAGTGGTGGTTTTCAAGGCCTTCG
TATCGAGCTGTGCATACGTGACGGAATCGCTCTCCAA
AGACCCCAACGTGTCGTCTTGCGACGACGCTTCGACC
G

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

Batch ID. BI211019-2

>RD707-3B_psbA-trnH

ATAATTTCCCTCTAGACTTAGCTGCTATCGAAGCTCCA
TCTACAAATGGATAAGACTTTGGTCTGATTGTATAGG
AGTTTTTGAAGTAAAAAGGAGCAATAGCTTCCCTCT
TGTTTTATCAAGAGGGCGTTATTGCTCCTTTTTTATT
TAGTAGTATTACCTTACATAGTTTCTTAAAAATAAC
AAGGGGGTTTTATAGTTTGGTTCGATTAGCGTGTTTTA
TCTTTGTATTAATTTATATTATAGGTTTATATATCCTTT
TCCCAATCGTTTATGAAGTTTATTTCCTCAACTCAATT
CAATCTAAAATAGATAAAAAATTATAATTTGATTATT
TATTGCTTTTATTTCAGAAATAAGAAATAAATTATAT
GCTTTTTTTTATGTTAATGGAATAAATAATATAGTA
GATAATACTAGATAATAGGGGCGGATGTAGCCAAGT
GGATCAAGGCAGT

Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BI211019-2

>RD707-3B_rbcL

AAAGTGTGGATTCAAAGCTGGTGTAAAGATTATAAA
TTGACTTATTATACTCTGACTATAAAACCAAGGATA
CTGATATCTTGGCAGCATTTCGAGTAACTCCTCAACCT
GGAGTTCGCGCTGAAGAAGCAGGGGCCGAGTAGCT
GCCGAATCTTCTACTGGTACATGGACAACGTGTGGGA
CCGATGGACTTACGAGCCTTGATCGTTACAAAGGGCG
ATGCTATGGAATCGAGCCTGTTCTGGAGAAGAAAGT
CAATTTATTGCTTATGTAGCTTACCCATTAGACCTTTT
TGAAGAAGGTTCTGTTACTAACATGTTTACTTCCATTG
TAGGTAATGTATTGGGTTCAAAGCCCTGCGTGCTCT
ACGTCTGGAAGATTGCGAATCCCTACTGCGTATGTT
AAAACCTTCCAAGGTCCGCTCACGGCATCCAAGTTG
AGAGAGATAAATTGAACAAGTATGGTCGTCCCCTGTT
GGGATGTACTATTAAACCTAAATTGGGGTTATCCGCT
AAAAACTACGGTAGAGCTGTTTATGAATGTCTT

Reference Detail

Description of reference material	Herba Saussureae Involucratae
Scientific name	<i>Saussurea involucrata</i> Kar. et Kir.
Laboratory number	RD707
Sample mark	RD707-3B
Locality	Huocheng County, Xinjiang Uygur Autonomous Region, China
Corresponding voucher specimen	RD676
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. BI211019-2

>RD707-4A ITS2

CGCATCGCGTCGCCCCAACCACGCCTCCCTCATGGG
GATGTGTTTTGTTTGGGGCGGAGAATGGTCTCCCGTG
CTCATGGTGCGTTGGCCTAAAAAGGAGYCCCCCTTCG
ACGGACGCACGGCTAGTGGTGGTTTTCAAGGCCTTCG
TATCGAGCTGTGCATACGTGACGGAATCGCTCTCCAA
AGACCCCAACGTGTCGTCTTGCGACGACGCTTCGACC
G

Remarks: observations at nucleotide position 103

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

Batch ID. BI211019-2

>RD707-4A *psbA-trnH*

ATAATTTCCCTCTAGACTTAGCTGCTATCGAAGCTCCA
TCTACAAATGGATAAGACTTTGGTCTGATTGTATAGG
AGTTTTTGAATAAAAAAGGAGCAATAGCTTCCCTCT
TGTTTTATCAAGAGGGCGTTATTGCTCCTTTTTTATT
TAGTAGTATTACCTTACATAGTTTCTTAAAAATAAC
AAGGGGGTTTTATAGTTTGGTTTCGATTAGCGTGTTTTA
TCTTTGTATTAATTTATATTATAGGTTATATATCCTTT
TCCCAATCGTTATGAAGTTTATTTCCAACCTCAATTT
CAATCTAAAATAGATAAAAAATTATAATTTTGATTATT
TATTGCTTTTATTTTCAAGAAATAAGAAATAAATTATAT
GCTTTTTTTTATGTTAATGGAAAAATAAAATATAGTA
GATAATACTAGATAATAGGGGCGGATGTAGCCAAGT
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Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BI211019-2

>RD707-4A *rbcL*

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GGAGTTCCGCCTGAAGAAGCAGGGGCCGAGTAGCT
GCCGAATCTTCTACTGGTACATGGACAACCTGTGTGGA
CCGATGGACTTACGAGCCTTGATCGTTACAAAGGGCG
ATGCTATGGAATCGAGCCTGTTCTGGAGAAGAAAGT
CAATTTATTGCTTATGTAGCTTACCCATTAGACCTTT
TGAAGAAGGTTCTGTTACTAACATGTTTACTTCCATTG
TAGGTAATGTATTTGGGTTCAAAGCCCTGCGTGCTCT
ACGCTCTGGAAGATTGCGAATCCCTACTGCGTATGTT
AAAACCTTTCCAAGGTCCGCCTCACGGCATCCAAGTTG
AGAGAGATAAAATTGAACAAGTATGGTCTGTCCTGTT
GGGATGTACTATTAAACCTAAATTGGGGTTATCCGCT
AAAAACTACGGTAGAGCTGTTTATGAATGTCTT

Reference Detail

Description of reference material	Herba Saussureae Involucratae
Scientific name	<i>Saussurea involucrata</i> Kar. et Kir.
Laboratory number	RD707
Sample mark	RD707-4A
Locality	Huocheng County, Xinjiang Uygur Autonomous Region, China
Corresponding voucher specimen	RD676
Authenticated	Yes
Remarks	ITS2: 103Y

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. BI211019-2

>RD707-5A ITS2

CGCATCGCGTCGCCCCAACCACGCCTCCCTCATGGG
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ACGGACGCACGGCTAGTGGTGGTTTTCAAGGCCTTCG
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AGACCCCAACGTGTCGTCTTGCGACGACGCTTCGACC
G

Remarks: observations at nucleotide position 71

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

Batch ID. BI211019-2

>RD707-5A *psbA-trnH*

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TCCCAATCGTTATGAAGTTTATTTCCAACCTCAATT
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GCTTTTTTTTTATGTTAATGGAAAAATAAAATATAGTA
GATAATACTAGATAATAGGGGCGGATGTAGCCAAGT
GGATCAAGGCAGT

Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BI211019-2

>RD707-5A *rbcL*

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AAAAACTACGGTAGAGCTGTTTATGAATGTCTT

Reference Detail

Description of reference material	Herba Saussureae Involucratae
Scientific name	<i>Saussurea involucrata</i> Kar. et Kir.
Laboratory number	RD707
Sample mark	RD707-5A
Locality	Huocheng County, Xinjiang Uygur Autonomous Region, China
Corresponding voucher specimen	RD676
Authenticated	Yes
Remarks	ITS2: 71Y

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. BI211019-2

>RD707-6A ITS2

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TATCGAGCTGTGCATACGTGACGGAATCGCTCTCCAA
AGACCCCAACGTGTCGTCTTGCGACGACGCTTCGACC
G

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

Batch ID. BI211019-2

>RD707-6A_psbA-trnH

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TATTGCTTTATTTCAGAAATAAGAAATAAATTATAT
GCTTTTTTTTATGTTAATGGAAAAATAAATATAGTA
GATAATACTAGATAATAGGGGCGGATGTAGCCAAGT
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Chloroplast ribulose biphosphate carboxylase large chain (*rbcL*)

Batch ID. BI211019-2

>RD707-6A_rbcL

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TAGGTAATGTATTGGGTTCAAAGCCCTGCGTGCTCT
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AAAACCTTCCAAGGTCCGCCTCACGGCATCCAAGTTG
AGAGAGATAAATTGAACAAGTATGGTCGTCCCCTGTT
GGGATGTACTATTAAACCTAAATTGGGGTTATCCGCT
AAAAACTACGGTAGAGCTGTTTATGAATGTCTT

Reference Detail

Description of reference material	Herba Saussureae Involucratae
Scientific name	<i>Saussurea involucrata</i> Kar. et Kir.
Laboratory number	RD707
Sample mark	RD707-6A
Locality	Huocheng County, Xinjiang Uygur Autonomous Region, China
Corresponding voucher specimen	RD676
Authenticated	Yes
Remarks	-

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 *Saussurea involucrata* and Chinese Materia Medica (CMM) Herba Saussureae Involucratae

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Chloroplast *psbA-trnH* intergenic spacer (*psbA-trnH*) sequence of plant voucher specimen of *Saussurea involucrata* and Chinese Materia Medica (CMM) Herba Saussureae Involucratae

>RD675-1B_psbA-trnH

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>RD705-1B_psbA-trnH

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>RD707-4A_psbA-trnH

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AGT

Partial chloroplast ribulose biphosphate carboxylase large chain (*rbcL*) sequence of plant voucher specimen of *Saussurea involucrata* and Chinese Materia Medica (CMM) Herba Saussureae Involucratae

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>RD676-1B_ *rbcL*

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