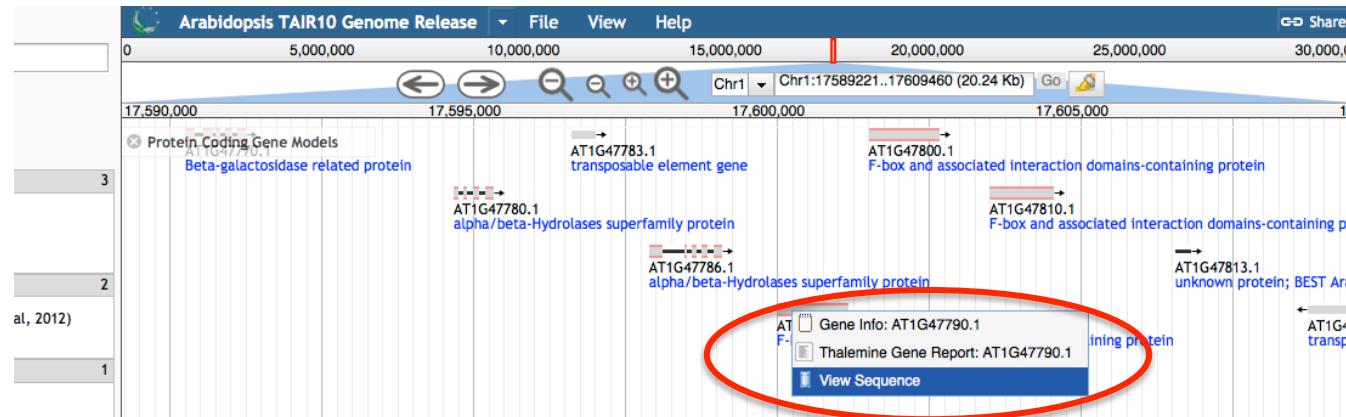
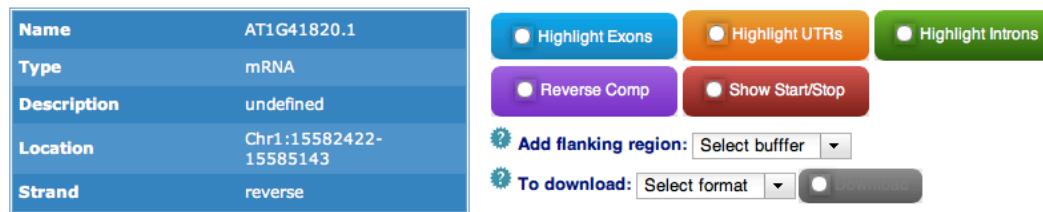


# Welcome to SeqLighter v1.0!

[1] To launch the sequence viewer, right click a gene model on the ‘Protein Coding Gene Models’ track. Select SeqLighter v1.0 on the dropdown menu.



[2] This will launch a popup screen displaying the nucleotide sequence of the selected gene model. The default format is in CODATA and there are other sequence formats such as FASTA, PRIDE, and RAW to choose from.



The screenshot shows the nucleotide sequence for AT1G41820.1. The sequence is presented in CODATA format, with a red circle highlighting the 'CODATA' label in the dropdown menu. The sequence itself is a string of nucleotides: 1 A T G A C T T A T T C C C G A G C A C C A C C C G G A A C T T T G A A C C A G C G G 41 A G C A G C T T G T A G C C G A G G G A G C A A G C T T T G G C C G A A C C A A G 81 A A G A C A A A A T G A C T C G T T T G A A G A C C A A A C T T C T C A A C C C A A 121 G C T A T T T T G G A C T A C C C A A A C A C T T G G A C A A G A A C C A T G A 161 T G G T T T G C G A T A T C T T T C C A A G A C G A T T G G T A A T G G G C T A A 201 G T G T T T G C T T T G G G T G C T C T T T T C C C T A C T A A G G T T T T G T 241 C C C A T T G G G T T T C C T T A G T A G G T T T T A A T G A G G C C T A A

[3] Flanking Sequence: An option to add upstream and downstream sequences of the gene model is available in 500bp, 1K, 2K, 3K and 4K. When one of these are selected, the additional sequence is highlighted in grey. Note: The flanking sequences will not be available in the downloaded image.

SeqLighter v1.0

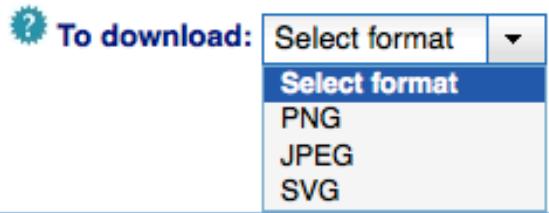
Add flanking region: 500 bp

To download: Select 500 bp

	5	10	15	20	25	30	35
1	A T A T A T A T A T A T A T A T	T T T T A T G A T T T T A C A G T	T T T T A A A A T	T T T T G A A A A A C	T T T T G C G T A G A T T A C	T T T T G G T C C T G A A	T T T T G G A A A A A C
41	A T T T A T A A C C G T A A T A	T C A A A T A A C T A A T A A T	T T T A A A A A C A A A T	T T T T A T T T T T T T T	T T T T T T T T T T T T T	T T T T T T T T T T T T T	T T T T T T T T T T T T T
81	A C A T T T C A T C A A A A A A	C T A A A A A A C T T T A T T T	T T T A A A A A A C A A A T	T T T T A T T T T T T T T	T T T T T T T T T T T T T	T T T T T T T T T T T T T	T T T T T T T T T T T T T
121	C T A A A A A A C T T T A T T T	T T T A A A A A A C A A A A A A	C T A A A A A A A A A A A A	T T T T A T T T T T T T T	T T T T T T T T T T T T T	T T T T T T T T T T T T T	T T T T T T T T T T T T T
161	A A G A T A A A A A A C T A T T	T T T A A A A A A C A G A C A G	A C A G A C A G A C A G A	T T T T A T T T T T T T T	T T T T T T T T T T T T T	T T T T T T T T T T T T T	T T T T T T T T T T T T T
201	T A T T A A G T T C C T A G G G	G A G C T T C A C A C A C A T	T G A A A T A A A C T G A G G	A T T G G T C C T G A A A A	T T T T T T T T T T T T T	T T T T T T T T T T T T T	T T T T T T T T T T T T T
241	T A A T A T G A T C C A A A A A	T A A A C A T G A A A A A A A	T G A A A T A A A C T G A G G	A T T G G T C C T G A A A A	T T T T T T T T T T T T T	T T T T T T T T T T T T T	T T T T T T T T T T T T T
281	A A T G C A T T G G G C C A T G	T G T A T C A C A A A A A A A	T A C A G A G C A G A C A G	A T T G G T C C T G A A A A	T T T T T T T T T T T T T	T T T T T T T T T T T T T	T T T T T T T T T T T T T
321	A G T T G G A A A C A T A T G G	A G T A A A A A A C A T T G G A	G A G T A T G A A T T G G A A T	T G A A T T C A C C T G G A T	T T T T T T T T T T T T T	T T T T T T T T T T T T T	T T T T T T T T T T T T T
361	A A T A T A T C T C A G A C A T	T C A T A A A A A A C A T C A T	T C A C A C A C A C A T T G	A T T G G T C C T G A A A A A	T T T T T T T T T T T T T	T T T T T T T T T T T T T	T T T T T T T T T T T T T
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441	C A A T G C T C T C T C T G T A	T T T T T T T T T T T T T T T T	T A T A A A A A A A A A A A A	T A T A A A A A A A A A A A A	T T T T T T T T T T T T T	T T T T T T T T T T T T T	T T T T T T T T T T T T T
481	A T C A C A T T C T C T C T A G	T T T T T C C C A C A C C T T A	T G T T T T T T T T T T T T T	T G T T T T T T T T T T T T T	T T T T T T T T T T T T T	T T T T T T T T T T T T T	T T T T T T T T T T T T T
521	C A A C A C A T A T A T T T T	T T T T T C T T C A C A A A A A A	A G A C A T A T T T T T T T T	A G A C A T A T T T T T T T T	T T T T T T T T T T T T T	T T T T T T T T T T T T T	T T T T T T T T T T T T T
561	C C T T G T T T T G T T T A C A	T T T T T C C C C G G C T A T	T C T T A T T T T T T T T T T	T C G A A T T T T T T T T T	T A T C G A T T T T T T T T	T T T T T T T T T T T T T	T T T T T T T T T T T T T
601	T C T T T G T C C T G G G A A T	T C C C C G G G C T A T G G G A	T G G G A A T T T T T T T T T	T G T C G A A T T T T T T T	T A G G T C A G T T T T T T	T C A G T T T T T T T T T	T G C A T T T T T T T T T
641	T C T A C A T C C A T T T T T T	T T T T T C C C T T G C A T T T	T G G G T G C A T T T G G G T	T G G G T G C A T T T G G G T	T T T T T T T T T T T T T	T T T T T T T T T T T T T	T T T T T T T T T T T T T
681	G A A T T C A G G A C A C A G A	G A G A G A G A G A G A C A T T	T G A A A A C T T T G A A A A A	T G A A A A C T T T G A A A A A	T T T T T T T T T T T T T	T T T T T T T T T T T T T	T C A T T T T T T T T T T
721	G T T A G A G A T T G A G G G A	G G G G A A T T T T A T A A A A A	T A T A A A A A A A A A A A A	A C T G A G G G C G G C G G C	T T T T T T T T T T T T T	T T T T T T T T T T T T T	T C C G G C G G C G G C G
761	C A T C C T A G C A T T T G T G	T G G T C A C A T A T A C A C	T A T A A A A A A A A A A A A	T G T C G G G C G G C G G C	T T T T T T T T T T T T T	T T T T T T T T T T T T T	T C C G G C G G C G G C G
801	T T C A G A A G G G A G G T C A	T G C C C A C C C C C A C A G A	T T T T T T T T T T T T T T T	T A T T A C G A C T T T T T T	T T T T T T T T T T T T T	T T T T T T T T T T T T T	T A G G C C C C C C C C C
841	A A C C A A A T C C C G G A A A C	A C G G C C C A G G G C G T T G	A C A T T T T T T T T T T T T	A C A T T T T T T T T T T T T	T G G A C A C T T C T A A C	T C T A A C T C T A A C T C	T A A C C C C C C C C C
881	G G G C G G A C A T T G A T T C G	A T C A T A T C A T A T C A T A	T A C G T C A T A T A C G T C	T A T A A T C T A A T C T A A	T A T A A T C T A A T C T A A	T C T A A T C T A A T C T A A	T A A C C C C C C C C C C
921	T A T C A T A T A G A A A A A T T	A T C A T A T C A T A T G T A T	T T T C A T T C A G A C T T T G	T T T C A G A C T T T G G A C	T T T C A G A C T T T G G A C	T T T C A G A C T T T G G A C	T T T C A G A C T T T G G A C
961	C T T C T A A T G C T A A G G G G	T G T T T G G A C A T C A C T A	T A T A A A A A A A A A A A A	T A T A A A A A A A A A A A A	T T T C A G A C T T T G G A C	T T T C A G A C T T T G G A C	T T T C A G A C T T T G G A C
1001	T T C C A A T G T T T G A C A G T	T A T G T C A T A T G A T C A T	T A T A A A A A A A A A A A A	T A T A A A A A A A A A A A A	T T T C A G A C T T T G G A C	T T T C A G A C T T T G G A C	T T T C A G A C T T T G G A C
1041	G T G G G T T T G T T A C A C T G	T G T C A C G T A T T G T A A G	T A T A A A A A A A A A A A A	T A T A A A A A A A A A A A A	T T T C A G A C T T T G G A C	T T T C A G A C T T T G G A C	T T T C A G A C T T T G G A C
1081	T G A A T T G A A T T G C T T T	A T T A A T T A A T A A T A A T	T A T A A A A A A A A A A A A	T A T A A A A A A A A A A A A	T T T C A G A C T T T G G A C	T T T C A G A C T T T G G A C	T T T C A G A C T T T G G A C
1121	T A A A T C C C T T G C T A A A C	T G T C A T A T G A T T G C T A	T A T A A A A A A A A A A A A	T A T A A A A A A A A A A A A	T T T C A G A C T T T G G A C	T T T C A G A C T T T G G A C	T T T C A G A C T T T G G A C
1161	A T G G G T T T C A T T A A A T A	A G A C C T A A C T G A A A A A	T A T A A A A A A A A A A A A	T A T A A A A A A A A A A A A	T T T C A G A C T T T G G A C	T T T C A G A C T T T G G A C	T T T C A G A C T T T G G A C
1201	A G A A G A G T T T A G T A G G A	A A T A T A T A T A T A T A T A	T A T A A A A A A A A A A A A	T A T A A A A A A A A A A A A	T T T C A G A C T T T G G A C	T T T C A G A C T T T G G A C	T T T C A G A C T T T G G A C
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1321	T T A T G G A C T A A C G A T A T	G C T A T G C T A T G G A G A T	T A T A A A A A A A A A A A A	T A T A A A A A A A A A A A A	T T T C A G A C T T T G G A C	T T T C A G A C T T T G G A C	T T T C A G A C T T T G G A C
1361	T A A T T A T A C C C A A T C T C	A G T C T A G C T T T T A G G T	T A T A A A A A A A A A A A A	T A T A A A A A A A A A A A A	T T T C A G A C T T T G G A C	T T T C A G A C T T T G G A C	T T T C A G A C T T T G G A C
1401	T T T T C C T T G C T T T A C C A T	C A T T T T T T T T T T T T T T	T A T A A A A A A A A A A A A	T A T A A A A A A A A A A A A	T T T C A G A C T T T G G A C	T T T C A G A C T T T G G A C	T T T C A G A C T T T G G A C
1441	T A T A T T T T T A T T T T G G T A	T C A A T T G C T A A G T A T T	T A T A A A A A A A A A A A A	T A T A A A A A A A A A A A A	T T T C A G A C T T T G G A C	T T T C A G A C T T T G G A C	T T T C A G A C T T T G G A C
1481	A T T T T C A A A A A A A A A A A	T T A A C A G A G A A A A A A A	T A T A A A A A A A A A A A A	T A T A A A A A A A A A A A A	T T T C A G A C T T T G G A C	T T T C A G A C T T T G G A C	T T T C A G A C T T T G G A C
1521	A A G A C T G A G A A G C T A A C	A C A A A A A A A A A A A A A A	T A T A A A A A A A A A A A A	T A T A A A A A A A A A A A A	T T T C A G A C T T T G G A C	T T T C A G A C T T T G G A C	T T T C A G A C T T T G G A C
1561	A A C G C A A C A A G G G A A A A	A C A A A A A A A A A A A A A A	T A T A A A A A A A A A A A A	T A T A A A A A A A A A A A A	T T T C A G A C T T T G G A C	T T T C A G A C T T T G G A C	T T T C A G A C T T T G G A C
1601	T G A T T C T A A G A A G A T T C	A T T A A T A T A T A T A T A T	T A T A A A A A A A A A A A A	T A T A A A A A A A A A A A A	T T T C A G A C T T T G G A C	T T T C A G A C T T T G G A C	T T T C A G A C T T T G G A C

OK

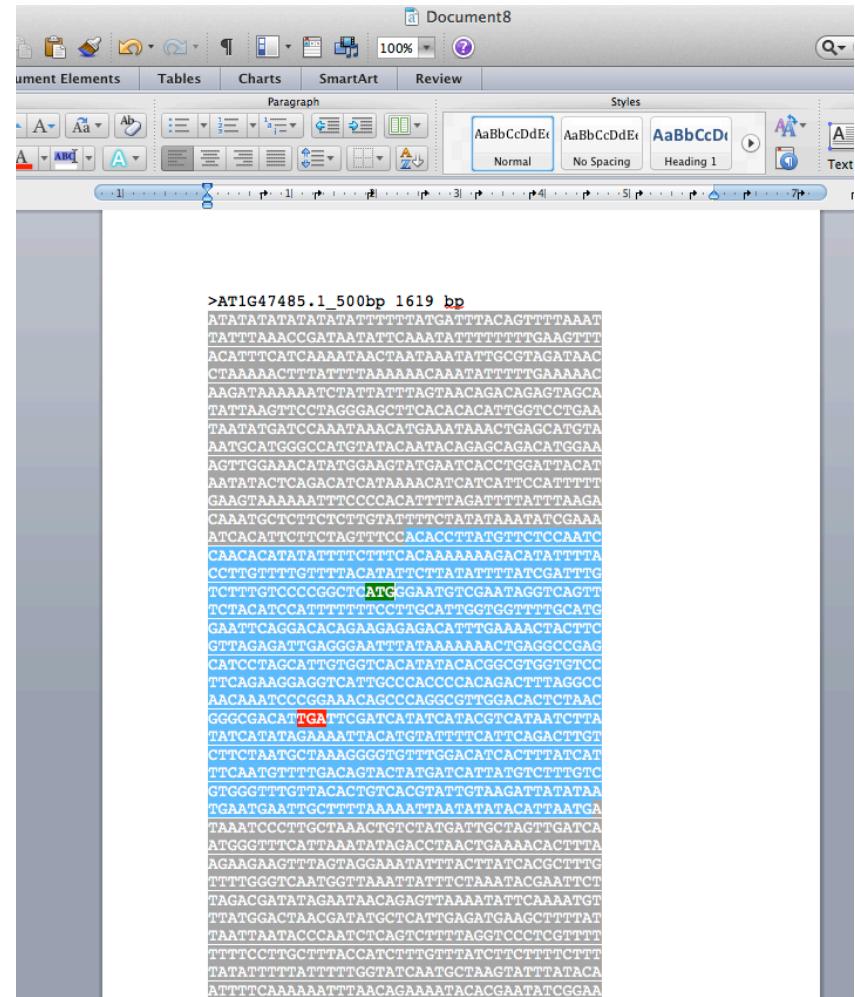
[4] The downloadable formats include PNG, JPEG and SVG. In addition, copying and pasting of the elements in the sequence box will retain any selected highlights. Note: The downloaded images will only be in CODATA format.



**PNG format**

AT1G47490.2_sequence.png	
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361	T A T C C G A A T C A C C A C C A C C T T A C C A T C A A T C T C G T G G T A
401	A T A A G C A T C A A A C G C T T T T A T G G T G A G A A T A A A A C C A T
441	A T G G G T T G G T G A T T T G C A T C A C T G G A T G G A T G A G G C T T A T
481	C T T A A T T C T T C T T G C T T C C G G C G A C G A G G T T T G C T T C T
521	C T C C T C T G C A T T A T T G C A A A A C A T T A T G T A T C T C T G
561	A T T A G A T T C T G T T T C G T T G A C T T T T A T G C T T T G A C C T T
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681	T T G A T C T C T C T T C T G T G A A T T T G G T C T A A A G G T G T G T
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761	T G A T T C G T A A T A A G A A C A A T G G T T T A T C A G A A G G A T A T G G
801	A T T T G T G G A G G T T T G A G T C C C A T G A T G T A G C T G A T A A G G T T
841	T T G C G G G A G T T T A A C G G G A C G A C T A T G G C C A A A T A C T G A C C
881	A A C T T T C G T T T G A A C T G G C T A G T T T A G C A C C G G T G A
921	G A G C G C G T T A G G A A C A A T G G A C C T G A T C T C T C T A T T T C
961	G T G G G G G A T T T G T C A C C A G A T G T T T C G G A T A A T T T G T T G C
1001	A C G A G A C C T T C T C T G A G A A G T A T C C G T C G G T T A A A G C T G C
1041	G A A G T T G T C C T T G A T G C T A A T A C T G G T A G G T C A A A G G G G
1081	T A T G G G T T T G T G A G G T T T G G T G A T G A G A A T G A A A G G A C C A
1121	A A G C A A T G A C T G A G A T G A A T G G T T A A A T G T T C T A G T A G
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1201	G G T T A T C A A C A A C A A G G T A A G T T C T T T C C A A T G C C A C T A T
1241	C T T G T T T T A A T C T A C T T G G A T A G T T C T A T G A A G T T T C
1281	A T T A G G A A A T C T G C T C A T T G T G A T G G T T C T T G G T A T T G C A A C
1321	A A T A T G T T T A C T C T C T G G T A C T T T A A C T A T T T G A T G G
1361	A T T T G G C A G G G T G G A T A C A T G C C G A A T G G T A C C T T G A C G C G
1401	T C C T G A A G G G G A C A T A A T G A A C A C A A C A G T A A T T G T T T T
1441	C C G T A G T A T C T T C T G T T T T C A A C C T T C A T G T G A A T G T G
1481	A C A A G G A G G T T A A T C T T C T T G T T T T G G T T T C C C C T
1521	T T A A T C T G T T T A A T A A C A T A G A T A T T T G T G G A G G G C T T G
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1601	T G A A T T C G G G G A A A T A G T C T C T G T C A A G A T T C C T G T G G T

Copy and paste will retain the highlighted regions.



[5] Highlighting options for exons, introns, utrs and start/stop codon is available. In addition, reverse complement of the selected sequence [including flanking regions] is available. When reverse complement is enabled, other highlighting options will not be available. The highlighting is available for all of the sequence formats such as FASTA, PRIDE, CODATA and RAW.

The screenshot shows a sequence viewer interface with the following details:

- Sequence ID:** AT1G47490.2
- Description:** mRNA
- Location:** RNA-binding protein 47C
- Chromosome:** Chr1:17424668-17427475
- Orient:** forward
- Tools:**
  - Highlight Exons
  - Highlight UTRs
  - Highlight Introns
  - Reverse Comp
  - Show Start/Stop
- Add flanking region:** Select buffer
- To download:** PNG (selected) or Download

Below the tools, there is a "Select format:" dropdown set to "CODATA". The main area displays a sequence of DNA with numbered positions from 5 to 921. A portion of the sequence is highlighted in orange, corresponding to the "Highlight Introns" option.

Select format: PRIDE

00001	ATTAATAGAT	ATCTCAAACA	CAACTCTCAA	AACTTGCCTC	00040
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00081	ATCACATAGC	AATCACITCA	CATCACAAAAA	CACCTCATAG	00120
00121	CCGCAAATT	TAATGCCAGA	CGTCAAGATT	CAATCCGAAT	00160
00161	CCGAATCTC	GGATTCTCAT	CCAGTGTCG	ACAAATCAAC	00200
00201	ACCTCTCCG	CCTCCCGCG	CGCAACAGCC	GGCGAAAGAA	00240
00241	GAGGAGAAC	AACCAAAAC	ATCTCCGACT	CCGGCCGCAC	00280
00281	ACTGGATGCCG	GTATCCACCA	ACGGTGATAA	TCCCTCATCA	00320
00321	GATGATGTC	GCGCCCGCG	CGTCCACCAC	TTATCATCAG	00360
00361	TATCCGAATC	ACCACCAACCT	TCACCATCAA	TCTCGTGGTA	00400
00401	ATAAGATCA	AAACGTTTT	ATATGGAGA	ATAAACCAT	00440
00441	ATGGGTTGGT	GATTGTCATC	ACTGGATGGA	TGAGGGTTAT	00480
00481	CTTAACTCTT	CTTGGCTTC	CGGCCACGAG	CTTGTCTTC	00520
00521	CTCTCTCTGT	CATTATGCA	AAACATTAT	GTATCTCTG	00560
00561	ATTAGATCT	GTTGGCTGTG	ACTTTAATG	CTTGGACCT	00600
00601	AAAAACCTTG	CCTTTTCAG	TTTCTCTCTG	TACTTGTCTG	00640
00641	CAAAGTTGCG	TTATATATCT	ATGTAACCTGG	CTGACTCGGT	00680
00681	TTGATCTCTC	TTTCTCTGTG	ATTTGGTCT	AAAGGTGTTG	00720
00721	TCTTTATGTT	TTATACAGAG	AGAGATTGTT	TCGGTGAAGG	00760
00761	TGATTGCTAA	TAAGACAAAT	GGTTTATCAG	AAGGATATGG	00800
00801	ATTTGTCGGAG	TTTGAATCCC	ATGATGTAGC	TGATAAAGGTT	00840
00841	TTGGGGGAGT	TTAAGCCGAC	GACTATGCCA	AATACTGAC	00880
00881	ACACTTTTCG	TTTGAATCTGG	GCTAGTTTA	GCACCGGTGA	00920
00921	GAAGCGGTTA	GAGAACAAATG	GACCTGATCT	CTCTATTTC	00960
00961	GTGGGGGATT	TGTCACAGA	TGTTGGAT	AATTGGTGC	01000
01001	ACGAGACCTT	CTCTGAGAAAG	TATCCGCTGG	TTAAAGCTGC	01040
01041	GAAAGTTGTC	CTTGATGCTA	ATACTGGTAG	GTCAAAGGGG	01080
01081	TATGGGTTTG	TGAGGTTTGG	TGATGAGAAT	GAAAGGACCA	01120
01121	AAGCAATGAC	TGAGATGAAT	GGTCTTAAAT	GTCTAGTAC	01160
01161	AGCTATGCC	ATCGGTCTG	CTACCCCCGAG	GAAGACTAAT	01200
01201	CGTTATCAC	AACAAGGTA	GTTCTTCCA	ATGCCACTAT	01240
01241	CTTTGTTTA	TAATCTACTT	GGATAGTTCT	ATGAAGTTTC	01280
01281	ATTAGAAATC	TGCTCAATTG	TAGGTTCTTG	GTATTGCAAC	01320
01321	AATATGTTT	ACTCTCTTGT	GTACTTTAAC	TATTTGATGG	01360
01361	ATTTGGCAGG	TGGATACATG	CCGAATGGTA	CCTTGACGCG	01400
01401	TCCTGAAGGG	GACATATA	ACACAAAGT	AATTGTTTT	01440
01441	CCGTTAGTATC	TTCTGTTTT	CAACCTTCA	TGTAATGTG	01480
01481	ACAAGAGAAG	CTTAATCTC	TTTTGTTTT	GTTCCTCCCT	01520

This sequence widget was built using the BioJS sequence viewer component.  
<http://biojs.net/jenkins/target/registry/Biojs.Sequence.html>