

# **Example Using BLAST.cgi**

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# **Abstract**

Shows how to use the BLAST.cgi on an example genetic sequence.

Citation: James Thornton Jr Example Using BLAST.cgi. protocols.io

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## **Protocol**

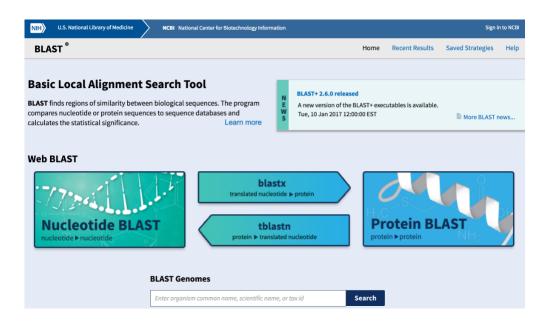
#### Step 1.

Go to the BLAST.cgi site.

https://blast.ncbi.nlm.nih.gov/Blast.cgi

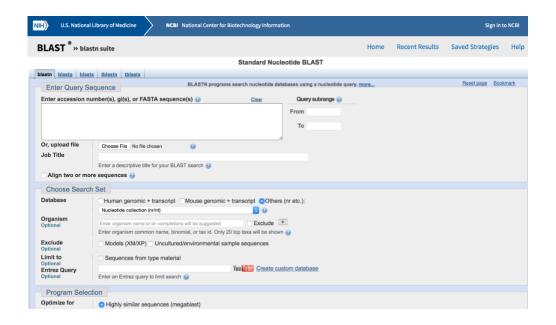
#### Step 2.

Click on Nucleotide BLAST found on the left of the page.



#### Step 3.

Copy + Paste your FASTA sequence into the 'Enter Query Sequence' box found at the top.



#### NOTES

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Example sequence:

## >Example1

CCAAATCAGATGCCGCCGGTCGCCGGTAGGCGGGACTTCCGGTACAAGATGGCGGAC AATTACGTCATTTCCTGTGACGTCATTTCCTGTGACGTCACTTCCGGTGGGCGGGACTTC CGGAATTAGGGTTGGCTCTGGGCCAGCTTGCTTGGGGTTGCCTTGACACTAAGACAAGCG GCGCGCCGCTTGATCTTAGTGGCACGTCAACCCCAAGCGCTGGCCCAGAGCCAACCCTAA TTCCGGAAGTCCCGCCCACCGGAAGTGACGTCACAGGAAATGACGTCACAGGAAATGACG TAATTGTCCGCCATCTTGTACCGGAAGTCCCGCCTACCGGCGGCGACCGGCGGCATCTGA TTTGGTGTCTTCTTTAAATTTTAGCGGGCTTTTTTCCCGCCTTATGCAAATGGGCAGCC ATTTTAAGTGTTTTACTATAATTTTATTGGTCAGTTTTGTAACGGTTAAAATGGGCGGAG TGTTAACATACTAACATGGAGCTATTTAGAGGGGTGCTTCAAGTTTCTTCTAATGTTCTG GACTGTGCTAACGATAACTGGTGGTGCTCTTTACTGGATTTAGACACTTCTGACTGGGAA CCACTAACTCATACTAACAGACTAATGGCAATATACTTAAGCAGTGTGGCTTCTAAGCTT GACTTTACCGGGGGGCCACTAGCAGGGTGCTTGTACTTTTTTCAAGTAGAATGTAACAAA TTTGAAGAAGGCTATCATATTCATGTGGTTATTGGGGGGCCAGGGTTAAACCCCAGAAAC CTCACAGTGTGTAGAGGGGTTATTTAATAATGTACTTTATCACCTTGTAACTGAAAAT GTGAAGCTAAAATTTTTGCCAGGAATGACTACAAAAGGCAAATACTTTAGAGATGGAGAG CAGTTTATAGAAAACTATTTAATGAAAAAAATACCTTTAAATGTTGGGTGGTGTGTGACT AATATTGATGGATATATAGACACCTGTATTTCTGCTACTTTTAGAAGGGGAGCTTGCCAT GCCAAGAAACCCCGCATTACCACAGCCATAAATGATACTAGTAGGGATGCTGGGGAGGCT AGCGGCACAGGGGCAGAGGTTGTGCCATTTAATGGAAAGGGAACTAAGGCTAGCATAAAG TTTCAAACTATGGTAAACTGGTTGTGTGAAAACAGAGTGTTTACAGAGGATAAGTGGAAA CTAGTTGACTTTAACCAGTACACTTTACTAAGCAGTAGTCACAGTGGAAGTTCTCAAATT

CAAAGTGCACTAAAACTAGCAATTTATAAAGCAACTAATTTAGTGCCTACTAGCACATTT TTATTGCATACAGACTTTGAGCAGGTTATGTGTATTAAAGACAATAAAATTGTTAAATTG TTACTTTGTCAAAACTATGACCCCCTATTGGTGGGGCAGCATGTGTTAAAGTGGATTGAT AAAAAATGTGGCAAGAAAAATACACTGTGGTTTTATGGGCCGCCAAGTACAGGAAAAACA AACTTGGCAATGGCCATTGCTAAAAGTGTTCCAGTATATGGCATGGTTAACTGGAATAAT GAAAACTTTCCATTTAATGATGTAGCAGGAAAAAGCTTGGTGGTCTGGGATGAAGGTATT ATTAAGTCTACAATTGTAGAAGCTGCAAAAGCCATTTTAGGCGGGCAACCCACCAGGGTA GATCAAAAAATGCGTGGAAGTGTAGCTGTGCCTGGAGTACCTGTGGTTATAACCAGCAAT GGTGACATTACTTTTGTTGTAAGCGGGAACACTACAACAACTGTACATGCTAAAGCCTTA AAAGAGCGCATGGTAAAGTTAAACTTTACTGTAAGATGCAGCCCTGACATGGGGTTACTA ACAGAGGCTGATGTACAACAGTGGCTTACATGGTGTAATGCACAAAGCTGGGACCACTAT GAAAACTGGGCAATAAACTACACTTTTGATTTCCCTGGAATTAATGCAGATGCCCTCCAC CCAGACCTCCAAACCACCCCAATTGTCACAGACACCAGTATCAGCAGCAGTGGTGGTGAA AGCTCTGAAGAACTCAGTGAAAGCAGCTTTTTTAACCTCATCACCCCAGGCGCCTGGAAC ACTGAAACCCCGCGCTCTAGTACGCCCATCCCCGGGACCAGTTCAGGAGAATCATTTGTC GGAAGCCCAGTTTCCTCCGAAGTTGTAGCTGCATCGTGGGAAGAAGCCTTCTACACACCT TTGGCAGACCAGTTTCGTGAACTGTTAGTTGGGGTTGATTATGTGTGGGACGGTGTAAGG GGCTTACCTGTGTGTGTGCAACATATTAACAATAGTGGGGGAGGCTTGGGACTTTGT GATTTGGTGCGATGTAGCTGCCATGTGGGAGCTTCTAATCCCTTTTCTGTGCTAACCTGC CAAATGGTGGGAAAGTGATGATAAATTTGCTAAAGCTGTGTATCAGCAATTTGTGGAATT TTATGAAAAAGTTACTGGAACAGCCTTAGAGCTTATTCAAATATTAAAAGATCATTATAA TATTTCTCTAGATAATCCCCTAGAAAACCCATCCTCTGTTTGACTTAGTTGCTCGTAT TAAAAATAACCTTAAAAACTCTCCAGACTTATATAGTCATCATTTTCAAAGTCATGGACA GTTATCTGACCACCCCCATGCCTTATCATCCAGTAGCAGTCATGCAGAACCTAGAGGAGA AAATGCAGTATTATCTAGTGAAGACTTACACAAGCCTGGGCAAGTTAGCGTACAACTACC CGGTACTAACTATGTTGGGCCTGGCAATGAGCTACAAGCTGGGCCCCCGCAAAGTGCTGT TGACAGTGCTGCAAGGATTCATGACTTTAGGTATAGCCAACTGGCTAAGTTGGGAATAAA TCCATATACTCATTGGACTGTAGCAGATGAAGAGCTTTTAAAAAAATATAAAAAATGAAAC GGCCCATTTTCAAGGAAGTTTGCCGGAAGTTCCCGCTTACAACGCCTCAGAAAAATACCC TCCTGTCAAAAGCATGTGGAGTGAGGGGGCCACTTTTAGTGCCAACTCTGTAACTTGTAC ATTITACAAACAGTTTTTAATTCCATATGACCCAGAGCACCATTATAAGGTGTTTTCTCC CGCAGCAAGTAGCTGCCACAATGCCAGTGGAAAAGAGGCAAAGGTTTGCACCATTAGTCC TTCACCTTTAGAGTTTCAGCACTTAATTGAAAATTATGGAAGTATAGCTCCTGATGCTTT AACTGTAACCATATCAGAAATTGCTGTTAAGGATGTTACAGACAAAACTGGAGGGGGGGT ACAGGTTACTGACAGCACTACAGGGCGCCTATGCATGTTAGTAGACCATGAATACAAGTA CCCATATGTGTTAGGGCAAGGTCAAGATACTTTAGCCCCAGAACTTCCTATTTGGGTATA CTTTCCCCCTCAATATGCTTACTTAACAGTAGGAGATGTTAACACACAAGGAATTTCTGG AGACAGCAAAAAATTAGCAAGTGAAGAATCAGCATTTTATGTTTTGGAACACAGTTCTTT CCAGCTTTTAGGTACAGGAGGTACAGCAACTATGTCTTATAAGTTTCCTCCAGTGCCCCC AGAAAATTTAGAGGGCTGCAGTCAACACTTTTATGAAATGTACAATCCCTTATACGGATC CCGCTTAGGGGTTCCTGACACATTAGGAGGTGACCCAAAATTTAGATCTTTAACACATGA AGACCATGCAATTCAGCCCCAAAACTTCATGCCAGGGCCACTAGTAAACTCAGTGTCTAC AAAGGAGGGAGACAGCTCTAATACTGGAGCTGGAAAAGCCTTAACAGGCCTTAGCACAGG TACCTCTCAAAACACTAGAATATCCTTACGCCCTGGGCCAGTGTCTCAGCCATACCACCA

CTGGGACACAGATAAATATGTCACAGGAATAAATGCCATTTCTCATGGTCAGACCACTTA TGGTAACGCTGAAGACAAAGAGTATCAGCAAGGAGTGGGTAGATTTCCAAATGAAAAAGA ACAGCTAAAACAGTTACAGGGTTTAAACATGCACACCTACTTTCCCAATAAAGGAACCCA GCAATATACAGATCAAATTGAGCGCCCCCTAATGGTGGGTTCTGTATGGAACAGAAGAGC CCTTCACTATGAAAGCCAGCTGTGGAGTAAAATTCCAAATTTAGATGACAGTTTTAAAAC TCAGTTTGCAGCCTTAGGAGGATGGGGTTTGCATCAGCCACCTCCTCAAATATTTTTGAA AATATTACCACAAAGTGGGCCAATTGGAGGTATTAAATCAATGGGAATTACTACCTTAGT TCAGTATGCTGTGGGAATTATGACAGTAACTATGACATTTAAATTGGGGCCCCGTAAAGC ATATGTACTATATGACCCCACAGCTACAGATGCAAAACAGCACCACAGACATGGATATGA AAAGCCTGAAGAATTGTGGACAGCCAAAAGCCGTGTGCACCCATTGTAAACACTCCCCAC CGTGCCCTCAGCCAGGATGCGTAACTAAACGCCCACCAGTACCACCCAGACTGTACCTGC CCCCTCCTGTACCTATAAGACAGCCTAACACAAAAGATATAGACAATGTAGAATTTAAGT ACTTAACCAGATATGAACAACATGTTATTAGAATGTTAAGATTGTGTAATATGTATCAAA ATTTAGAAAAATAAACATTTGTTGTGGTTAAAAAATTATGTTGTTGCGCTTTAAAAATTT AAAAGAAGACACCAAATCAGATGCCGCCGGTCGCCGGCGGTAGGCGGGACTTCCGGTACA AGATGGCGGACAATTACGTCATTTCCTGTGACGTCATTTCCTGTGACGTCACTTCCGGTG GGCGGGACTTCCGGAATTAGGGTTGGCTCTGGGCCAGCGCTTGGGGTTGACGTGCCACTA GCCAACCCTAATCCCGGAAGTCCCGCCCACCGGAAGTGACGTCACAGGAAATGACGTCAC AGGAAATGACGTAATTGTCCGCCATCTTGTACCGGAAGTCCCGCCTACCGGCGGCGACCG **GCGGCATCTGATTTGG** 

# Step 4.

Click "BLAST" at the bottom of the page.

#### Step 5.

The sequence will now be queried. The time required depends on the sequence length. If you use the example sequence given, it should be relatively guick.

#### Step 6.

Once complete the following graphical display is shown:

