**Supplementary Information**

# JBP485 promotes tear and mucin secretion in ocular surface epithelia

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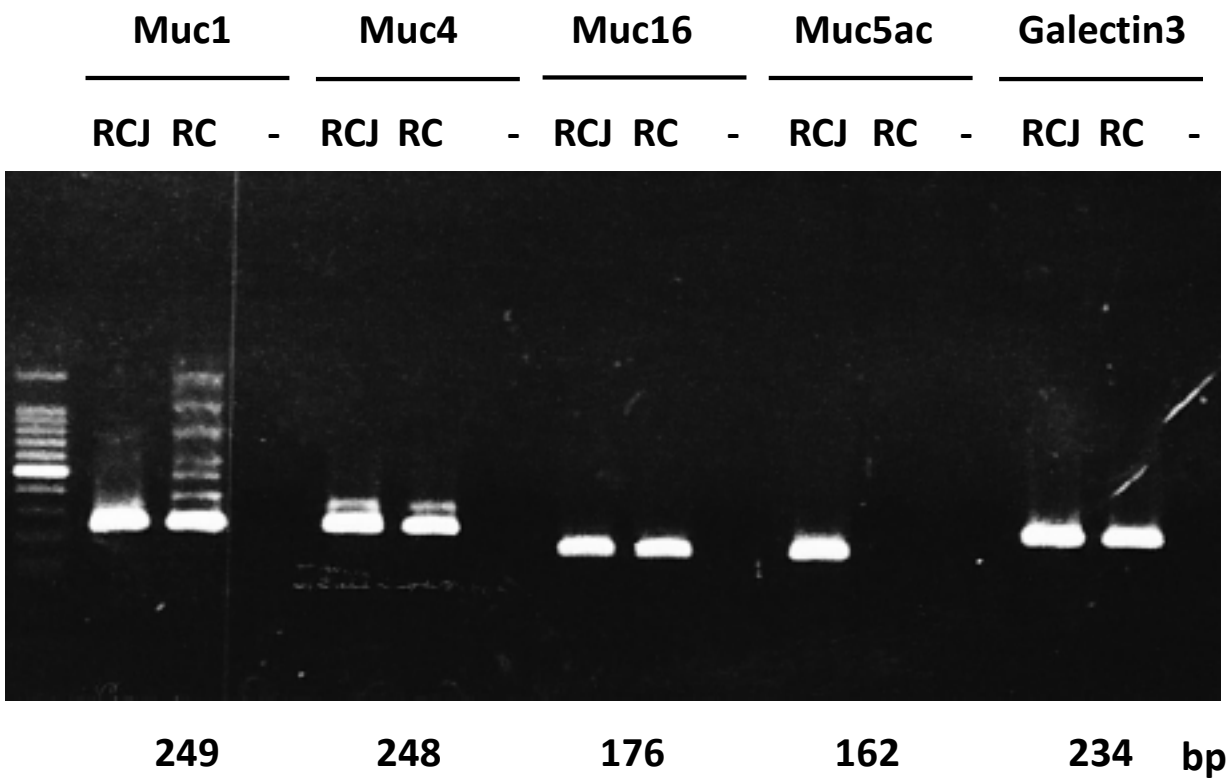
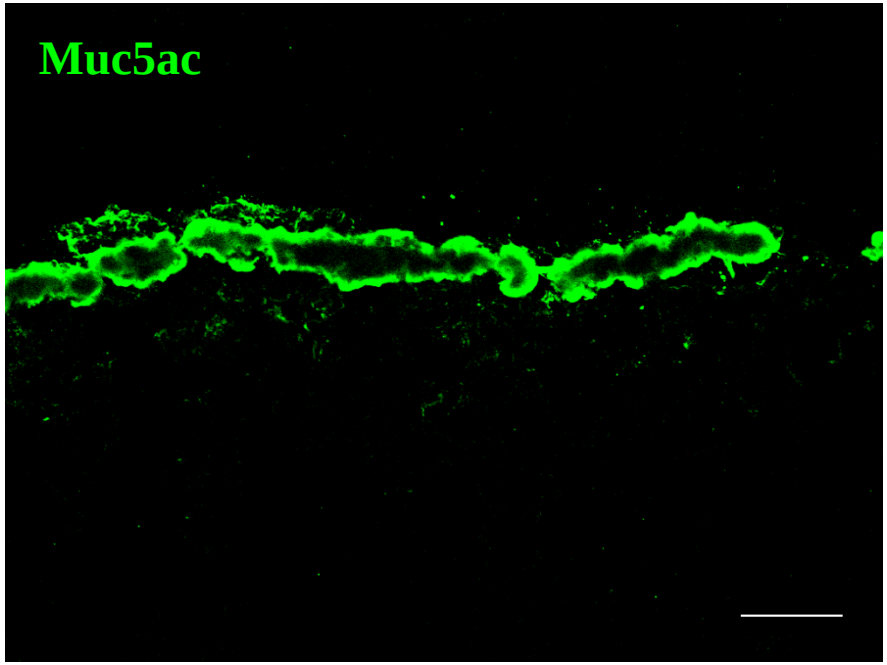
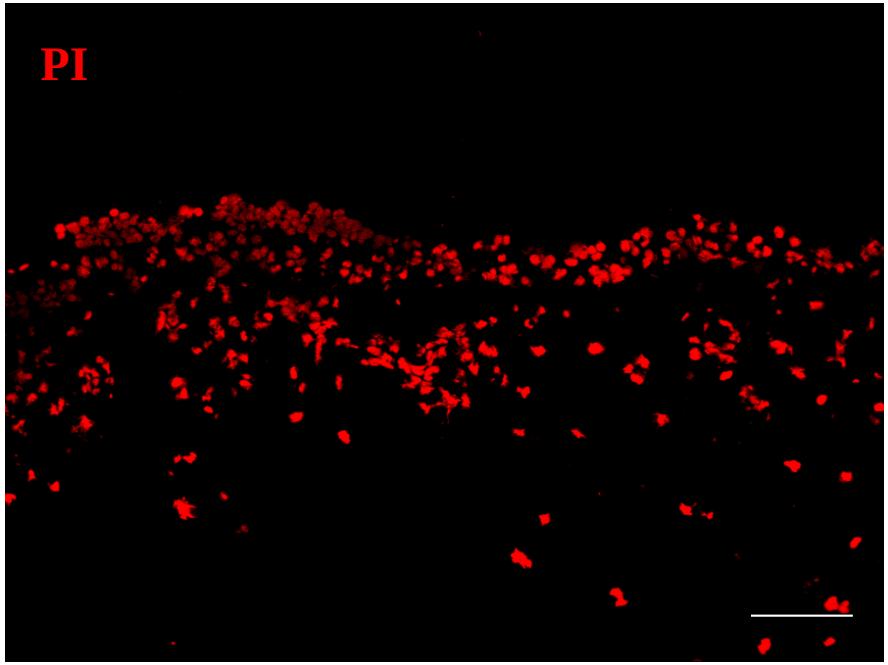
**Figure S1.**
PCR for Muc1/Muc4/Muc16/Muc5ac and Galectin 3 in rabbit conjunctiva and cornea.




**RCJ: Rabbit Conjunctiva**
**RC: Rabbit Cornea**
**-: Negative control**



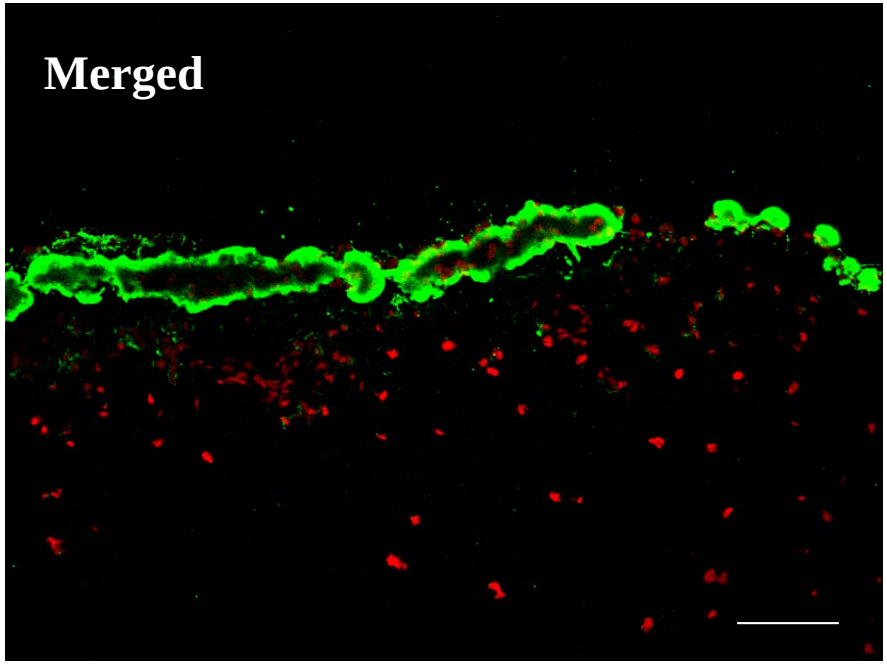




**Figure S2.**
Immunostaining for Muc5ac (green) in rabbit conjunctiva. Nuclei are counterstained with PI (red).
Scale bars, 100μm.

Supplemental Table 1. Sequence for PCR

| | | | |
|---|---|---|---|
| Muc1 | F | GGAATGTTTCGGCACTGATT | |
| | R | GAACTCCAGACTGGGCAGAG | size 249 |
| Muc4 | F | GTGCCTTTCTCTGGAACAGC | |
| | R | CACCCTTGAGATGGGGTAGA | size 248 |
| Muc16 | F | TGCCAAATACCAGTGGAACA | |
| | R | GTCTCCGAGCCAAAGATGAG | size 176 |
| Galectin3 | F | ACTTTAACCCCCGCTTCAAT | |
| | R | TTCCCAGCTTGTTGATTTCC | size 234 |
| Muc5ac | F | CCCCAACGTCAAGAACAACT | |
| | R | TCAAACAGGCAGTTCGAGTG | size 162 |

F:Forward, R: Reverse

**Supplemental Information 1.**

CLUSTAL 2.1 multiple sequence alignment

**Muc1**

```
human          CGCTCCACCTCTCAAGCAGCCAGCGCCTGCCTGAATCTGTTCTGCCCCCTCCCCACCCAT
rabbit         ----------------GCCACCAGCCCCG--------------------------------
                              **..***** **

human          TTCACCACCACCATGACACCGGGCACCCAGTCTCCTTTCTTCCTGCTGCTGCTCCTCACA
rabbit         ------TCCACGAAGTCACC-------------------------------------------
                     :**** *:*:****

human          GTGCTTACAGTTGTTACGGGTTCTGGTCATGCAAGCTCTACCCCAGGTGGAGAAAAGGAG
rabbit         ----------------------------------TCTGCCCCGG--------------
                                                ***.****.*

human          ACTTCGGCTACCCAGAGAAGTTCAGTGCCCAGCTCTACTGAGAAGAATGCTGTGAGTATG
rabbit         ------------------------------------------------------------


human          ACCAGCAGCGTACTCTCCAGCCACAGCCCCGGTTCAGGCTCCTCCACCACTCAGGGACAG
rabbit         -------------------CCACCAGCCCCACGTCGGTCTCAGCCACCAGCCCCGTCCAC
                                *..*******.  **.* ***. ******  *. * .**

human          GATGTCACTCTGGCCCCGGCCACGGAACCAGCTTCAGGTTCAGCTGCCACCTGGGGACAG
rabbit         GAAGTCACCTCTGCCCCAGCCACCAGCCCTGCATCAGACTTGGCCACCAGCCCTGTCCAT
               **:*****    *****.***** ...**:**:****. * .** .*** *   * .**

human          GATGTCACCTCGGTCCCAGTCACCAGGCCAGCCCTGGG------CTCCACCACCCCGCCA
rabbit         GAAGTCACCTCTGCCCCTGCCACCAGCCCCACCCCCACGTCGGTCTCAGCCACCTCCCCC
               **:******** * ***:* ****** **..***  .       ***..***** * **.

human          GCCCACGATGTCACCTCAGCCCCGGACAACAAGCCAGCCCCGGGCTCCACCGCCCCCCCA
rabbit         GTTCACGAAGTCACCTCGGCCCCGGCCACCAGCCCCACGTCGGTCTCAGATACCAGCCCC
               *  *****:********.*******.**.**. **..*  *** ***... .**. ***.
```

```
human           GCCCACGGTGTCACCTCGGCCCCGGACACCAGGCCGGCCCCGGGCTCCACCGCCCCCCCA
rabbit          GTCCATGAAGTCACCTCGGCCCTGACCACCAGCCCCACGTCGGTCTCAGCCACCAGCCCC
                * *** *.:************** *..****** ** .*  *** ***..**.**. ***.

human           GCCCATGGTGTCACCTCGGCCCCGGACAACAGGCCCGCCTTGGGCTCCACCGCCCCTCCA
rabbit          GTCCACGAAGTTACCTCTGCCCCGGCCACCAGCCCCACGTCGGTCTCAGCCACCAGCCCC
                * *** *.:** ***** *******.**.*** ***.* * * ** ***..**.**.  **.

human           GTCCACAATGTCACCTCG------GCCTCAGGCTCTGCATCAGGCTCAGCTTCTACTCTG
rabbit          GTCCATGAAGTCACCTCGGCCCCGGCCACCAGCCCCACGTCGGTCTCAGCCACCTCCCCC
                ***** .*:*********      ***:*..** * .*.**.* ****** :* :* *

human           GTGCACAACGGCACCTCTGCCAGGGCTACCACAACCCCAG---CCAGCAAGAGCACTCCA
rabbit          GTCCACGAAGTCACCTCTGCCCTGGCCACCACCATGCCAGTTGGCACTCTGAGCACACCA
                ** ***.*.* **********.  *** *****.*  ****    **  .:******:***

human           TTCTCAATTCCCAGCCACCACTCTGATACTCCTACCACCCTTGCCAGCCATAGCACCAAG
rabbit          TCTTCGGTTCCCAG---CCACACTGGCACTCCCACCACCCTTCCCAGCCCCAGCCACAG-
                *  **..*******   ****:***.  ***** ********* ******.  ***..**.

human           ACTGATGCCAGTAGCACTCACCATAGCACGGTACCTCCTCTCACCTCCTCCAATCACAGC
rabbit          -------------------------CACGGGTTCTCCTGTCACCACTTCGACTCAGAGC
                                         ***** : ***** *****:* ** *.*** ***

human           ACTTCTCCCCAGTTGTCTACTGGGGTCTCTTTCTTTTTCCTGTCTTTTCACATTTCAAAC
rabbit          ACTGCTCCCCAGGTGTCTGCTGGTTTGTCTTTCTTCTTCCTGTCTTTTTACATCACCAAC
                *** ******** *****.****  * ******** ************ **** :*.***

human           CTCCAGTTTAATTCCTCTCTGGAAGATCCCAGCACCGACTACTACCAAGAGCTGCAGAGA
rabbit          CTGCAGTTCAATTCTTCCCTGGAGGATCCAAGCAGCAAGTACTATCAAGAGCTGCAGAGG
                ** ***** ***** ** *****.*****.**** *.* ***** ***************.

human           GACATTTCTGAAATGTTTTTGCAGATTTATAAACAAGGGGGTTTTCTGGGCCTCTCCAAT
rabbit          AATGTTTCGGCACTGATTTCACAGATCTATGGACAGAAGAACTTCCTGGGCCTCTCTGGT
                .* .**** *.*.**:*** .***** ***..***...*.. ** ********** ..*
```

```
human           ATTAAGTTCAGGCCAGGATCTGTGGTGGTACAATTGACTCTGGCCTTCCGAGAAGGTACC
rabbit          ATCAGGTTCAGGCCAGGATCCGTGGTGGTGGACTTGATTCTGGCCTTCCAGGAGGGCAGC
                ** *.*************** ********. *.**** ***********..**.** * *

human           ATCAATGTCCACGACGTGGAGACACAGTTCAATCAGTATAAAACGGAAGCAGCCTCTCGA
rabbit          ACCAATGAAGTCACGGTGCAGTCACAGTTTATTCAGAATATACCGCAAGCAGCCAG---G
                * *****:. :*.. *** **:******* *:****:***:*.** ********:    .

human           TATAACCTGACGATCTCAGACGTCAGCGTGAGTGATGTGCCATTTCCTTTCTCTGCCCAG
rabbit          TATAACCTGAACATTTCAAGAGTCACAGTGCGTGATGTTCTGTCTCCCTCCTCTGCCCAG
                **********. ** ***...**** .***.******* * .* *** * **********

human           TCTGGGGCTGGGGTGCCAGGCTGGGGCATCGCGCTGCTGGTGCTGGTCTGTGTTCTGGTT
rabbit          TCTGG------AGTTCCAGGCTGGGGGATCGCCCTGCTCGTGCTGGTCTGTGTCCTGCTT
                *****      .** ********** ***** ***** ************** *** **

human           GCGCTGGCCATTGTCTATCTCATTGCCTTGGCTGTCTGTCAGTGCCGCCGAAAGAACTAC
rabbit          GCGCTGGCCATCATCTATTTCATAGCCCTGGCCGTGTGTCAGTGCCGTCGCAAGAACTGC
                ********** .***** ****:*** **** ** ********** **.*******.*

human           GGGCAGCTGGACATCTTTCCAGCCCGGGATACCTACCATCCTATGAGCGAGTACCCCACC
rabbit          GGGCAGCTGGATCTCTTCCCGACCCGGGATACCTACCACCCCATGAGTGAGTACCCTACC
                ********** .**** **..**************** ** ***** ******** ***

human           TACCACACCCATGGGCGCTATGTGCCCCCTAGCAGTACCGATCGTAGCCCCTATGAGAAG
rabbit          TACCACACCCACGGCCGCTACGTGCCCCCTGGCAGCACCAGACGGAGCCCATATGAGGAG
                ********** ** ***** *********.**** ***..:** *****.******.**

human           GTTTCTGCAGGTAATGGTGGCAGCAGCCTCTCTTACACAAACCCAGCAGTGGCAGCCACT
rabbit          GAATCTGCGGGCAACGGGGGTAGCGGCCTTTCTTACACGAGTCCACCCGTGGCAGCCACT
                *::*****.** ** ** ** ** ***.**** ********.*.  *** *.**********

human           TCTG-CCAACTTGTAGGGGCACGTCGCCCGCTGAGCTGAGTGGCCAGCCAGTGCCATTCC
rabbit          TCTGCCCATCTTGCTGGGACATG-----TACTTTTACCAAGGGCCAGCCCGGGGCTGGCT
                **** ***:**** :***.** *      .** : .  *. ********.* * *:  *
```

```
human           ACTCCACTCAGGTTCTTCAGGGCCAGAGCCCCTGCACCCTGTTTGGGCTGGTGAGCTGGG
rabbit          ------------------------------------------------------------

human           AGTTCAGGTGGGCTGCTCACAGCCTCCTTCAGAGGCCCCACCAATTTCTCGGACACTTCT
rabbit          ------------------------------------------------------------

human           CAGTGTGTGGAAGCTCATGTGGGCCCCTGAGGGCTCATGCCTGGGAAGTGTTGTGGTGGG
rabbit          ------------------------------------------------------------

human           GGCTCCCAGGAGGACTGGCCCAGAGAGCCCTGAGATAGCGGGGATCCTGAACTGGACTGA
rabbit          ------------------------------------------------------------

human           ATAAAACGTGGTCTCCCACTGCGCCAA
rabbit          ---------------------------
```

Underline fields are primer sequences we used.

**Supplemental Information 2.**

CLUSTAL 2.1 multiple sequence alignment

**Muc4**

```
human           CTCTTTTGTCCTCTTCCCAGGTTCCCTGGCCCCTTCGGAGAAACGCACTTGGTTCGGGCC
rabbit          -------------------------ACATCTCCCTCCAAATTTAGCCAGATG-------CC
                                        .*:   **** *..* ::*  ** :**       **

human           AGCCGCCTGAGGGGACGGGCTCACGTCTGCTCCTCACACTGCAGCTGCTGGGCCGTGGAG
rabbit          ATCAACAACATCCGAAGTGCTCACAACACCAACTTCTACATATTCAACTG----------
                * *..*.: *   **.* ******.:*: *:.** . **: .: *:.***

human           CTTCCCCAGGGAGCCAGGGGGACTTTTGCCGCAGCCATGAAGGGGGCACGCTGGAGGAGG
rabbit          ------------------------------------------------------------


human           GTCCCCTGGGTGTCCCTGAGCTGCCTGTGTCTCTGCCTCCTTCCGCATGTGGTCCCAGGA
rabbit          ------------------------------------------------------TAGAA
                                                                     **.*

human           ACCACAGAGGACACATTAATAACTGGAAGTAAAACTGCTGCCCCAGTCACCTCAACAGGC
rabbit          ACAACAGAAGAAACATCATCACCCAAAACTGGGAGTCCTCCTCCAGTCACCTCAGGAGTC
                **.*****.**.**** *: *.* ..** *...* * ** * ***********. ** *

human           TCAACAACAGCGACACTAGAGGGACAATCAACTGCAGCTTCTTCAAGGACCTCTAATCAG
rabbit          TCCACAACAAC-----------------------AACTTCTTCAACAACCTCCACTCAG
                **.******.*                       *.********* .***** *.****

human           GACATATCAGCTTCATCTCAGAACCACCAGACTAAGAGCACGGAGACCACCAGCAAAGCT
rabbit          GAAACATCAGCAGTTTCTCAGAATCCACAGACTCAGGGTAGGGAGACCACCAGAGGATCT
                **.* ******:  :******** *..******.**.* * ***********...* **

human           CAAACCGACACCCTCACGCAGATGATGACATCAACTCTTTTTTCTTCCCCAAGTGTACAC
rabbit          CCAACCAGCACCCATGTGGAGGTGACTACATCAACACCTCCATCCTATCCAGGTGAAAAC
                *.****..*****: . * **.***  ********:* *  :** *.  ***.***:*.**
```

```
human           AATGTGATGGAGACAG------------CTCCTCCAGATGAAATGACCACATCATTTCCC
rabbit          ACTCTGACAGAGACTGTCTCTCAGGCGACATCCCCTCCAGGTGAAACAGCCACATCTCCC
                *.* *** .*****:*            *: * **: .:*.:.:.**..*.:*** ****

human           TCCAGTGTCACCAACACACTCATGATGACATCAAAGACTATAACAATGACAACCTCCACA
rabbit          TCCAGTGTTAGCCAGACATCAAC---AACATCAGAAGTGCTCAAAACTCCAACCTCCTCA
                ******** * *.* ***  .*    .******.*..  .*.*.**  .********:**

human           GACTCCACTCTTGGAAACACAGAAGAGACATCAACAGCAGGAACTGAAAGTTCTACCCCA
rabbit          TATTCAACTGTGGAAACAACCGAAGAAACGTCAACATCTAAAACTGGGAGTCCTCCTCCA
                 * **.*** * *.**..**.*****.**.****** *:..*****..*** **.* ***

human           GTGACCTCAGCAGTCTCAATAACAGCTGGACAGGAAGGACAATCACGAACAACTTCCTGG
rabbit          GTCACCTCAGCAGTCTCCTCAACAG------------------------CAACTTCTTCA
                ** ***************.: *****                       ******* * .

human           AGGACCTCTATCCAAGACACATCAGCTTCTTCTCAGAACCACTGGACTCGGAGCACGCAG
rabbit          ACAACCTCCACTCAGGAAACATCAGCCGTTTCTCAGAATCCACAGACTCAGGGTGGGGAG
                * .***** *  **.**.********   ********* *.. .*****.*.* . * **

human           ACCACCAGGGAATCTCAAACCAGCACCCTAACACACAGAACCACTTCAACTCCTTCTTTC
rabbit          ACCACCAGAGGATCTCCAACCAGCACCCATGTGGAGGTGACTACATCAGCACCTCCATCC
                ********.*.*****.***********::. . * . .** **:***.*:*** *:* *

human           TCTCCAAGTGTACACAATGTGACAGGGACTGTTTCTCAGAAGACATCTCCTTCAGGTGAA
rabbit          TCCCCAGGTAGACATAGTGTGTCACTGACAATTTCTCAGGCAACATCCCCTCTAGGTGAA
                ** ***.**.  *** *.****:**  ***:.********...***** ***  *******

human           ACAGCTACCTCATCCCTCTGTAGTGTCACAAACACATCCATGATGACATCAGAGAAGATA
rabbit          ACAGCCACCACATCTGTTTCCATAGTCAGCAAGACACCCCTGAGAACAGCAGGAGTGATG
                ***** ***:****  * *  * :**** .** *** **.*** .*** ***...:***.

human           ACAGTGACAACCTCCACAGGCTCCACTCTTGGAAACCCAGGGGAGACATCATCAGTACCT
rabbit          ACAATGACAACTTCTGCACCCTCAACTCTGGCAACCACAGAAGG---TACGTCATCCTCT
                ***.******* ** .**  ***.***** * **.*.***..*.   ::*.***  . **
```

```
human           GTTACTGGAAGTCTTATGCCAGTCACCTCAGCAGCCTTAGTAACATTTGATCCAGAAGGA
rabbit          AACACTGGGAGTCCTCCTCCAGTCACCTCAGCAGTCTCCACAACAGCTGCAACAGAAGAA
                .: *****.**** *.  ********************** ..  ****  **.:.******.*

human           CAATCACCAGCAACTTTCTCAAGGACTTCTACTCAG---GACACAACAGCTTTTTCTAAG
rabbit          AAATCTGCATCAACCTCTTTAACGACCTCCACTCTGGATGGAACATTAGCATTTTCATGG
                .****: ** **** *  * ** *** ** ****:*   *..***: ***:*****::.*

human           AACCACCAGACTCAGAGCGTGGAGACCACCAGAGTATCTCAAATCAACACCCTCAACACC
rabbit          AACCCCCAGACTCAGAGCATGGGTACCAGCACAGCATCCCACACCAG---------TGCC
                ****.**************.***.  **** ** ** *** **.* **.          .**

human           CTCACACCGGTTACAACATCAACTGTTTTATCCTCACCAAGTGGATTCAACCCAAGTGGA
rabbit          CCTACAGAGGAGACTGCATCAACTCCTACATCTTCTCTGAGTGGACACACTCTGACAGAG
                *  *** .**: **:.********  *: *** **:* .****** :**.  * .* :*..

human           ACAGTTTCTCAGGAGACATTCCCTTCTGGTGAAACAACCACCTCATCCCCTTCCAGTGTC
rabbit          ACCATTTCCCAGGAGACAATCCCTCCAACTAAAATGGCCACTATACCTCCTTCCAGTACC
                **..**** *********:***** *:. *.*** ..**** : * * *********. *

human           AGCAATACATTCCTGGTAACATCAAAGGTGTTCAGAATGCCAACCTCCAGAGACTCTACT
rabbit          CACAACACAGACCCAACAACAATGGAGGTATCCAAAATGCCAACCTCCCCAGACTCCACT
                ..*** *** :** ..  ****: ..****.* **.**********.  ****** ***

human           CTTGGAAACACAGAGGAGACATCACTATCTGTAAGTGGAACCATTTCTGCAATCACTTCC
rabbit          GTGGAAAACAGAGGGCACACATCACTACCTACAACTGGGAACATGCCTGTATTCACTTCT
                 * *.***** **.* * ********* **.  ** ***.*.***  *** *:*******

human           AAAGTTTCAACCATATGGTGGTCAGACACTCTGTCAACAGCACTCTCCCCCAGTTCTCTA
rabbit          AAAGTGTCAACCACAC----------------------CCCTCTCAACTAGTTCTTTA
                ***** ******* *                       *.*****..* ****** **

human           CCTCCAAAAATATCCACAGCTTTCCACACCCAGCAGAGTGAAGGTGCAGAGACCACAGGA
rabbit          ACTTCAAAAACATTAACAGTTTTCCCCACCTACCAAAGAAAAGGCACAGAGACTCCAAGA
                .** ****** ** .**** *****.**** * **.**:.**** .******* .**.**
```

```
human           CGGCCTCATGAGAGGAGCTCATTCTCTCCAGGTGTGTCTCAAGAAATATTTACTCTACAT
rabbit          TGGTCTCATGACAGCAGCCTGATTTCTACAAGTATGTCCCAGGAGACATTCATTACAGAG
                 ** ******* ** ***  .:* ***.**.**.**** **.**.* *** * *. * *

human           GAAACAACAACATGGCCTTCCTCATTCTCCAGCAAAGGCCACACAACTTGGTCACAAACA
rabbit          AAAATGACAATGGTGACATCATCATTCTCTGTTGATAACAACACAACTCAGCTTCCAAAA
                .*** .**** .  *.*:**.******** .  .*:..*.******** .*  :*.**.*

human           GAACTGCCCTCAACATCAACAGGTGCTGCCACTAGGCTTGTCACAGGAAATCCATCTACA
rabbit          GAACTATTGTCAATGCCAACAGGAGTTACCTGTTACCTTGTCACCAAAAGCCCAACTCCT
                *****.   **** . *******:* *.**: *:. ********...**. ***:**.*:

human           GGGACAGCTGGCACTATTCCAAGGGTCCCCTCTAAGGTCTCAGCAATAGGGGAACCAGGA
rabbit          TCAACAACTGGCACCACAGTTTGGGTCACACCTGAGGTCCCAACAACAGGAGAATTAGGA
                  .***.******* * :  ::*****.*.  **.***** **.*** ***.***  ****

human           GAGCCCACCACATACTCCTCCCACAGCACAACTCTCCCAAAAACAACAGGGGCAGGCGCC
rabbit          GAGTCAACCACACAGCCTGATATGAGCCCATCTACTCAGAAAACCATGATAGCAGTTTCC
                *** *.****** *  *  . .: ***.**:**.  *..*****.* .. .****   **

human           CAGACACAATGGACACAAGAAACGGGGACCACTGGAGAGGCTCTTCTCAGCAGCCCAAGC
rabbit          CAGACACAATGGACACAAGGTCCAAGGACCACTGGAGAGATTCACATCAACAGTCCGAGC
                ******************.:.*..**************. **: .***.*** **.***

human           TACAGTGTGACTCAGATGATAAAAACGGCCACATCCCCATCTTCTTCACCTATGCTGGAT
rabbit          TCTGGTTCAACTATGGTCATGGAAACAGTGGCATCCCCATCTCCTTCATCAACAATAAGC
                *. .**  .***.:*.* **..****.*  .********** ***** *:* ..*...

human           AGACACACATCCCAACAAATTACAACGGCACCATCAACAAATCATTCAACAATACATTCC
rabbit          AGACATACATCTCAAGAAACTATCACAGCATGGCCAAAAGCTCAGTCCACACCACTCCCA
                ***** ***** *** *** ** .**.***  . ***.*..*** **.***. **:  *.

human           ACAAGCACCTCTCCTCAGGAATCACCAGCTGTTTCCCAAAGGGGTCACACTCAAGCCCCG
rabbit          CCCAGCAGCTTTCCTCGGGAATCCTTGTCTATGCCCAGCATAGGTCACACTCACGCCACA
                .*.**** ** *****.******.  . **.*  **...* .**********.***.*.
```

```
human           CAGACCACACAAGAATCACAAACCACGAGGTCCGTCTCCCCCATGACTGACACCAAGACA
rabbit          CTGACCACACCAGAATCCCAAGCCATGAGTTCAATCACCCCCGAGACTGACACACCCAAT
                *:********.******.***.*** *** **..**:*****.:*********... *.:

human           GT---CACCACCCCAGGTTCTTCCTTCACAGCCAGTGGGCACTCGCCCTCAGAAATTGTT
rabbit          GTGGCAACATCCGCAGCCTCTTCTGCCACACCAAGTGGACCCTCATCCTCAGAAAGCACT
                **   .**.:** ***  *****   **** *.*****.*.***. *********  . *

human           CCTCAGGACGCACCCACCATAAGTGCAGCAACAACCTTTGCCCCAGCTCCCACCGGGGAT
rabbit          CCTCAGGAGGCATCCACCGTGGCTGCGGTGACAACCTCCATCCCTGCACCCTCCAGG---
                ******** *** *****.*.. ***.* .*******  . ***:**:***:**.**

human           GGTCACACAACCCAGGCCCCGACCACAGCACTGCAGGCAGCACCCAGCAGCCATGATGCC
rabbit          ---------GACAGCCACCCAGCCACAGGACCACGGCCAGCACCACCCAGCCCCAGCCCC
                         ..*..  .***..****** ** .*.* *******.. *****. ..  **

human           ACCCTGGGGCCCTCAGGAGGCACGTCACTTTCCAAAACAGGTGCCCTTACTCTGGCCAAC
rabbit          ACCCTCCGGCCCTCCGGAGCCCCATCACTCTCCACAGCAAGCACGGTTTCCCAGGACGCT
                *****  *******.**** *.*.***** ****.*.**.* .*  **:* *:**.*..

human           TCTGTAGTGTCAACACCAGGGGGCCCAGAAGGACAATGGACATCAGCCTCTGCCAGCACC
rabbit          GCTGTCACCTCCCCATCAGGGGGCCCAGGAGGACAGCAGGCATTGCCTTTTGCAAGCACC
                 ****..  **.** ***********.******. .*.*** . * * ***.******

human           TCACCTGACACAGCAGCAGCCATGACCCATACCCACCAGGCTGAGAGCACAGAGGCCTCT
rabbit          TCCCCTGACACAGCCCAAGTCATTTCCCAAACCCAGCAGACTCGAGGCACAGAGACCACC
                **.**********. .** *** :****:***** ***.** ...********.**:*

human           GGACAAACACAGACCAGCGAACCGGCCTCCTCAGGGTCACGAACCACCTCAGCGGGCACA
rabbit          GGGGAGGCTCAGCCCAGCACACCAGCCCCCTCAGTGCCAGACCCCACCGCCGCAGCCATG
                **. *..*:***.*****..***.*** ****** * ** ...***** *.**.* ** .

human           GCTACCCCTTCCTCATCCGGGGCGAGTGGCACAACACCTTCAGG---AAGCGAAGGAATA
rabbit          GCTGCCACGTCTTCCCCCACGGCAAGGGGCACAACCTTTGGAAGGGCTTTCCCGGAAACG
                ***.**.* ** **. **. ***.** ********.  *  *.*   :: * ..*.** .
```

```
human           TCCACCTCAGGAGAGACGACAAGGTTTTCATCAAACCCCTCCAGGGACAGTCACACAACC
rabbit          GCCACTGCAGCCAAGACCACCGACTTTCCCACAACTCCCTCCAGCAGCAGCCACGCAGCT
                 ****  *** ..**** **...  *** *.:***.  ******** ..*** ***.**.*

human           CAGTCAACAACCGAATTGCTGTCCGCCTCAGCCAGTCATGGTGCCATCCCAGTAAGCACA
rabbit          CCGCCAACGGCTGAGCTGTTGTCCTCTGGCACCAGTCCTGACGCTACCCCTGCAGCCGTA
                *.* ****..* **.  ** ***** *   ..******.**.  ** * ***:* *.  *.  *

human           GGAATGGCGTCTTCGATCGTCCCCGGCACCTTTCATCCCACCCTCTCTGAGGCCTCCACT
rabbit          GGAATGAGGTCTCCTGCTGTACCCAGCACCTCTCCTCCTACCATCACTGGGGTCCCGACT
                ******.  **** * .  **.***.****** **.*** ***.**:***.** * * ***

human           GCAGGGAGACCGACAGGACAGTCAAGCCCAACTTCTCCCAGTGCCTCTCCTCAGGAGACA
rabbit          GATTGGACAGCGTCTTCCAG----------------------GACCCCTCAGGAGAAG
                *.: *** * **:*:  ...                       :* **********..

human           GCCGCCATTTCCCGGATGGCCCAGACTCAGAGGACAAGAACCAGCAGAGGGTCTGACACT
rabbit          CCAGCTGTCTCCCAGATGGCTCACACTCCAAGTGCAGGAGCCACCAGAGGACCTGAAGTC
                 *.** .* ****.****** ** ****..** .**.**.*** ******.  ****..

human           ATCAGCCTGGCGTCCCAGGCAACCGACACCTTCTCAACAGTCCCACCCACACCTCCATCG
rabbit          AGCACCTTGGCCTGGCAGCTCACTGACACCTTCTCAGCAGTCACAGCGCCACCACCCTCG
                * ** * **** *  ***  .** ***********.*****.** * .****:**.***

human           ATCACATCCACTGGGCTTACATCTCCACAAACCGAGACCCACACTCTGTCACCTTCAGGG
rabbit          CCCACAACCACG-------------------------------------------------
                .  ****:****

human           TCTGGTAAAACCTTCACCACGGCCCTCATCAGCAACGCCACCCCTCTTCCTGTCACCTAC
rabbit          ------------------------------------------------------------


human           GCTTCCTCGGCATCCACAGGTCACACCACCCCTCTTCATGTCACCGATGCTTCCTCAGTA
rabbit          ------------------------------------------------------------
```

```
human           TCCACAGGTCACGCCACCCCTCTTCCTGTCACCAGCCCTTCCTCAGTATCCACAGGTCAC
rabbit          ------------------------------------------------------------

human           ACCACCCCTCTTCCTGTCACCGACACTTCCTCAGAATCCACAGGTCACGTCACCCCTCTT
rabbit          ------------------------------------------------------------

human           CCTGTCACCAGCTTTTCCTCAGCATCCACAGGTGACAGCACCCCTCTTCCTGTCACTGAC
rabbit          ------------------------------------------------------------

human           ACTTCCTCAGCATCCACAGGTCACGTCACCCCTCTTCCTGTCACCAGCCTTTCCTCAGCA
rabbit          ------------------------------------------------------------

human           TCCACAGGTGACACCACCCCTCTTCCTGTCACTGACACTTCCTCAGCATCCACAGGTCAC
rabbit          ---CCCACTGAGCACACATCACAAACCGAGACTCGCACTCCCTCACCTTCAGGCAGCAGC
                   .*.. *** ..***. *:*::.* *: *** .**** ***** *:**.. ..* ..*

human           GCCACCTCTCTTCCTGTCACCGACACTTCCTCAGTATCCACAGGTCACACCACCCCTCTT
rabbit          ACAGCCTCTATTAATTCTTCATTGTCTCAGTCTGTACCTGGCCCTCCCAGCACCGGGAGT
                .*..*****.**..*   :*. : :** . **:*** * . .  **.** ****   . *

human           CCTGTCACCGACACTTCCTCAGCATCCACAGGTCACGCCACCTCTCTTCCTGTCACCGAC
rabbit          CCT-------------------------------------------------------
                ***

human           ACTTCCTCAGTATCCACAGGTCACACCACCCCTCTTCATGTCACTGATGCTTCCTCAGCA
rabbit          ---CCTACCCTAGTTCCAGGTCACACTGCTCCCCTGCCAGTTACAACTACTTCCTCCCCA
                    * :*. **   .********** .* ** ** *.:** **:..*.*******. **

human           TCCACAGGTCAGGCCACCCCTCTTCCTGTCACCAGCCTTTCCTCAGTATCCACAGGTGAC
rabbit          CCCACAG---------------------------------------------------
                 ******
```

```
human           ACCACGCCTCTTCCTGTCACTAGCCCTTCCTCAGCATCCACAGGTCACGCCACCCCTCTT
rabbit          ------------------------------------------------------------

human           CTTGTCACCGACACTTCCTCAGCATCCACAGGACACGCCACCCCTCTTCCTGTCACCGAC
rabbit          ------------------------------------------------------------

human           GCTTCCTCAGTGTCCACAGATCACGCCACCTCTCTTCCTGTAACCATCCCTTCCGCAGCA
rabbit          ------------------------------------------------------------

human           TCCACAGGTCACACCACCCCTCTTCCTGTCACCGACACTTCCTCAGCATCCACAGGTCAG
rabbit          ------------------------------------------------------------

human           GCCACCTCTCTTCTTGTCACCGACACTTCCTCAGTATCCACAGGTGACACCACGCCTCTT
rabbit          ------------------------------------------------------------

human           CCTGTCACTAGCACTTCCTCAGCATCCACAGGTCACGTCACTCCTCTTCATGTCACCAGC
rabbit          ------------------------------------------------------------

human           CCTTCCTCAGCATCCACAGGTCACGCCACCCCTCTTCCTGTCACCAGCCTTTCCTCAGCA
rabbit          ------------------------------------------------------------

human           TCCACAGGTGACACCATGCCTCTTCCTGTCACTAGCCCTTCCTCAGCATCCACAGGTGAC
rabbit          ------------------------------------------------------------

human           ACCACCCCTCTTCCTGTCACCGACGCTTCCTCAGTATCCACAGGTCACACCACCCCTCTT
rabbit          ------------------------------------------------------------
```

```
human    CATGTCACTGATGCTTCCTCAGCATCCACAGGTCAGGCCACCCCTCTTCCTGTCACCAGC
rabbit   ------------------------------------------------------------

human    CTTTCCTCAGTATCCACAGGTGACACCACGCCTCTTCCTGTCACTAGCCCTTCCTCAGCA
rabbit   ------------------------------------------------------------

human    TCCACAGGTCACGCCACCCCTCTTCTTGTCACCGACACTTCCTCAGCATCCACAGGACAC
rabbit   ------------------------------------------------------------

human    GCCACCCCTCTTCCTGTCACCGACGCTTCCTCAGTGTCCACAGATCACGCCACCTCTCTT
rabbit   ------------------------------------------------------------

human    CCTGTAACCATCCCTTCCGCAGCATCCACAGGTCACACCACCCCTCTTCCTGTCACCGAC
rabbit   ------------------------------------------------------------

human    ACTTCCTCAGCATCCACAGGTCAGGCCACCTCTCTTCTTGTCACCGACACTTCCTCAGTA
rabbit   ------------------------------------------------------------

human    TCCACAGGTGACACCACGCCTCTTCCTGTCACTAGCACTTCCTCAGCATCCACAGGTCAC
rabbit   ------------------------------------------------------------

human    GTCACTCCTCTTCATGTCACCAGCCCTTCCTCAGCATCCACAGGTCACGCCACCCCTCTT
rabbit   ------------------------------------------------------------

human    CCTGTCACCAGCCTTTCCTCAGCATCCACAGGTGACACCATGCCTCTTCCTGTCACTAGC
rabbit   ------------------------------------------------------------
```

```
human    CCTTCCTCAGCATCCACAGGTGACACCACCCCTCTTCCTGTCACCGACGCTTCCTCAGTA
rabbit   ------------------------------------------------------------

human    TCCACAGGTCACACCACCCCTCTTCCTGTCACCAGCCCTTCCTCAGCATCTACAGGTCAC
rabbit   ------------------------------------------------------------

human    ACCACCCCTCTTCCTGTCACCGACACTTCCTCAGCATCCAAAGGTGACACCACCCCTCTT
rabbit   ------------------------------------------------------------

human    CCTGTCACCAGCCCTTCCTCAGCATCTACAGGTCACACCACCCCTCTTCCTGTCACCGAC
rabbit   ------------------------------------------------------------

human    ACTTCCTCAGCATCCACAGGTGACACCACCCCTCTTCCTGTCACCAATGCTTCCTCATTA
rabbit   ------------------------------------------------------------

human    TCCACAGGTCACGCCACCCCTCTTCATGTCACCAGCCCTTCCTCAGCATCCACAGGTCAC
rabbit   ------------------------------------------------------------

human    GCCACCCCTCTTCCTGTCACCAGCACTTCCTCAGCATCCACCGGTCACGCCACCCCTCTT
rabbit   ------------------------------------------------------------

human    CCTGTCACCGGCCTTTCCTCAGCTACCACAGATGACACCACCCGTCTTCCTGTCACCGAC
rabbit   ------------------------------------------------------------

human    GTTTCCTCGGCATCCACAGGTCAGGCCACCCCTCTTCCTGTCACCAGCCTTTCCTCAGTA
rabbit   ------------------------------------------------------------
```

```
human    TCCACAGGTGACACCACGCCTCTTCCTGTCACTAGCCCTTCCTCAGCATCCACAGGTCAC
rabbit   ------------------------------------------------------------

human    GCCAGCCCTCTTCTTGTCACTGACGCTTCCTCAGCATCCACAGGTCAGGCCACCCCTCTT
rabbit   ------------------------------------------------------------

human    CCTGTCACCGACACTTCCTCAGTATCCACAGCTCACGCCACCCCACTTCCTGTCACCGGC
rabbit   ------------------------------------------------------------

human    CTTTCTTCAGCTTCCACAGATGACACCACCCGTCTTCCTGTCACCGACGTTTCCTCGGCA
rabbit   ------------------------------------------------------------

human    TCCACAGGTCAGGCCATCCCTCTTCCTGTCACCAGCCCTTCCTCAGCATCCACAGGTGAC
rabbit   ------------------------------------------------------------

human    ACCACCCCTCTTCCTGTCACCGACGCTTCCTCAGCATCCACAGGTGACACCACCTCTCTT
rabbit   ------------------------------------------------------------

human    CCTGTCACCATCCCTTCCTCAGCATCTTCAGGTCACACCACCTCTCTTCCTGTCACCGAC
rabbit   ------------------------------------------------------------

human    GCTTCCTCAGTGTCCACAGGTCACGCCACCTCTCTTCTTGTCACCGACGCTTCCTCAGTA
rabbit   ------------------------------------------------------------

human    TCCACAGGTGACACCACCCCTCTTCCTGTCACCGACACTAACTCAGCATCCACAGGTGAC
rabbit   ------------------------------------------------------------
```

```
human    ACCACCCCTCTTCATGTCACCGACGCTTCCTCAGTATCCACAGGTCACGCCACCTCTCTT
rabbit   ------------------------------------------------------------

human    CCTGTCACCAGCCTTTCCTCAGCATCCACAGGTGACACCACGCCTCTTCCTGTCACTAGC
rabbit   ------------------------------------------------------------

human    CCTTCCTCAGCATCCTCAGGTCACACCACCCCTCTTCCTGTCACCGACGCTTCCTCAGTA
rabbit   ------------------------------------------------------------

human    CCCACAGGTCACGCCACCTCTCTTCCTGTCACCGACGCTTCCTCAGTGTCCACAGGTCAC
rabbit   ------------------------------------------------------------

human    GCCACCCCTCTTCCTGTCACCGACGCTTCCTCAGTGTCCACAGGTCATGCCACCCCTCTT
rabbit   ------------------------------------------------------------

human    CCGGTCACCGACACTTCCTCAGTATCTACAGGACAGGCCACCCCTCTTCCTGTCACCAGC
rabbit   ------------------------------------------------------------

human    CTTTCCTCAGCATCCACTGGTGACACCACGCCGCTTCCTGTCACCGATACTTCCTCAGCA
rabbit   ------------------------------------------------------------

human    TCCACAGGTCAGGACACCCCTCTTCCTGTCACCAGCCTTTCCTCAGTATCCACAGGTGAC
rabbit   ------------------------------------------------------------

human    ACCACGCCTCTTCCTGTCACTAACCCTTCCTCAGCATCCACAGGTCACGCCACCCCTCTT
rabbit   ------------------------------------------------------------
```

```
human          CTTGTCACCGACGCTTCCTCAATATCCACAGGTCACGCCACCTCTCTTCTTGTCACCGAC
rabbit         ------------------------------------------------------------

human          GCTTCCTCAGTATCCACAGGTCACGCCACCGCTCTTCATGACACCGATGCTTCCTCATTA
rabbit         ------------------------------------------------------------

human          TCCACAGGGGACACCACCCCTCTTCCTGTCACCAGCCCTTCCTCAACATCCACAGGTGAC
rabbit         ------------------------------------------------------------

human          ACCACCCCTCTTCCTGTCACCGAAACTTCCTCAGTATCCACAGGTCACGCCACCTCTCTT
rabbit         ------------------------------------------------------------

human          CCTGTCACCGACACTTCCTCAGCATCCACAGGTCACGCCACCTCTCTTCCTGTCACCGAC
rabbit         ------------------------------------------------------------

human          ACTTCCTCAGCATCCACAGGTCACGCCACCCCTCTTCCTGTCACCGACACTTCCTCAGCA
rabbit         ------------------------------------------------------------

human          TCCACAGGTCAGGCCACCCCTCTTCCTGTCACCAGCCCTTCCTCAGCATCCACAGGTCAC
rabbit         ------------------------------------------------------------

human          GCCATCCCTCTTCTTGTCACCGACACTTCCTCAGCATCCACAGGACAGGCCACCCCTCTT
rabbit         ------------------------------------------------------------

human          CCTGTCACCAGCCTTTCCTCAGCATCCACAGGTGACACCACCCCTCTTCCTGTCACCGAC
rabbit         ------------------------------------------------------------
```

```
human    GCTTCCTCAGTGTCCACAGGTCACGCCACCTCTCTTCCTGTCACCAGCCTTTCCTCAGTA
rabbit   ------------------------------------------------------------

human    TCCACAGGTGACACCACTCCTCTTCCTGTCACTAGCCCTTCCTCAGCATCCACAGGTCAC
rabbit   ------------------------------------------------------------

human    GCCACCCCTCTTCATGTCACCGACGCTTCCTCAGCATCCACAGGTCACGCCACCCCTCTT
rabbit   ------------------------------------------------------------

human    CCTGTCACCAGCCTTTCCTCAGCATCCACAGGTGACACCACGCCTCTTCCTGTCACTAGC
rabbit   ------------------------------------------------------------

human    CCTTCCTCAGCATCCACAGGTCACGCCACCCCTCTTCATGTCACCGACGCTTCCTCAGTA
rabbit   ------------------------------------------------------------

human    TCCACAGGTGACACCACCCCTCTTCCTGTCACCAGCTCTTCCTCAGCATCCTCAGGTCAC
rabbit   ------------------------------------------------------------

human    ACCACCCCTCTTCCTGTCACCGACGCTTCCTCAGCATCCACAGGTGACACCACCCCTCTT
rabbit   ------------------------------------------------------------

human    CCTGTCACCGACACTTCCTCAGCATCCACAGGTCACGCCACCCATCTTCCTGTCACCGGC
rabbit   ------------------------------------------------------------

human    CTTTCCTCAGCTTCCACAGGTGACACCACCCGTCTTCCTGTCACCAACGTTTCCTCGGCA
rabbit   ------------------------------------------------------------
```

```
human          TCCACAGGTCATGCCACCCCTCTTCCTGTCACCAGCACTTCCTCAGCATCCACAGGTGAC
rabbit         ------------------------------------------------------------

human          ACCACCCCTCTTCCTGGCACCGACACTTCCTCAGTATCCACAGGTCACACCACCCCTCTT
rabbit         ------------------------------------------------------------

human          CTTGTCACCGACGCTTCGTCAGTATCCACAGGTGACACCACCCGTCTTCCTGTCACCAGC
rabbit         ------------------------------------------------------------

human          CCTTCCTCAGCATCTACAGGTCACACCACCCCTCTACCTGTCACCGACACTCCCTCAGCA
rabbit         ------------------------------------------------------------

human          TCCACAGGTGACACCACCCCTCTTCCTGTCACCAATGCTTCCTCATTATCCACACGTCAC
rabbit         ------------------------------------------------------------

human          GCCACCTCTCTTCATGTCACCAGCCCTTCCTCAGCATCCACAGGTCACGCCACCTCTCTT
rabbit         ------------------------------------------------------------

human          CCTGTCACCGACACTTCCGCAGCATCCACAGGTCACGCCACCCCTCTTCCTGTCACCAGC
rabbit         ------------------------------------------------------------

human          ACTTCCTCAGCATCCACAGGTGACACCACCCCTCTTCCTGTCACCGACACTTACTCAGCA
rabbit         ------------------------------------------------------------

human          TCCACAGGTCAGGCCACCCCTCTTCCTGTCACCAGCCTTTCCTCAGTATCCACAGGTGAC
rabbit         ------------------------------------------------------------
```

```
human           ACCACGCCTCTTCCTGTCACTAGCCCTTCCTCAGCATCCACAGGTCACGCCACTCCTCTT
rabbit          ------------------------------------------------------------

human           CTTGTCACCGACGCTTCCTCAGCATCCACAGGTCAGGCCACCCCTCTTCCTGTCACCAGC
rabbit          ------------------------------------------------------------

human           CTTTCCTCAGTATCCACAGGTGACACCACGCCTCTTCCTGTCACTAGCCCTTCCTCAGCA
rabbit          ------------------------------------------------------------

human           TCCACCGGTCATGCCACCTCTCTTCCTGTCACCGACACTTCCTCAGCATCCACAGGTGAC
rabbit          ------------------------------------------------------------

human           ACCACCTCTCTTCCTGTCACCGACACTTCCTCAGCATACACAGGTGACACCACCTCTCTT
rabbit          ------------------------------------------------------------

human           CCTGTCACCGACACTTCCTCATCATCCACAGGTGACACCACCCCTCTTCTTGTCACCGAG
rabbit          ------------------------------------------------------------

human           ACTTCCTCAGTATCCACAGGTGACACCACCCCTCTTCCTGTCACCGACACTTCCTCAGCA
rabbit          ------------------------------------------------------------

human           TCCACAGGTCACGCCACCCCTCTTCCTGTCACCAACACTTCCTCAGTATCCACAGGTCAC
rabbit          ------------------------------------------------------------

human           GCCACCCCTCTTCATGTCACCAGCCCTTCCTCAGCATCCACAGGTCACACCACCCCTCTT
rabbit          ------------------------------------------------------------
```

```
human    CCTGTCACCGACGCTTCGTCAGTGTCCACAGGTCACGCCACCTCTCTTCCTGTCACCGAC
rabbit   ------------------------------------------------------------

human    GCTTCCTCAGTGTTCACAGGTCATGCCACCTCTCTTCCTGTCACCATCCCTTCCTCAGCA
rabbit   ------------------------------------------------------------

human    TCCTCAGGTCACACCACCCCTCTTCCTGTCACCGACGCTTCCTCAGTGTCCACAGGTCAC
rabbit   ------------------------------------------------------------

human    GCCACCTCTCTTCCTGTCACCGACGCTTCCTCAGTGTCCACAGGTCATGCCACCCCTCTT
rabbit   ------------------------------------------------------------

human    CCTGTCACCGACGCTTCCTCAGTGTCCACAGGTCACGCTACCCCTCTTCCTCTCACCAGC
rabbit   ------------------------------------------------------------

human    CTTTCCTCAGTATCCACAGGTGACACCACGCCTCTTCCTGTCACCGACACTTCCTCAGCA
rabbit   ------------------------------------------------------------

human    TCCACAGGTCAGGCCACCCCTCTTCCTGTCACCAGCCTTTCCTCAGTATCCACAGGTGAC
rabbit   ------------------------------------------------------------

human    ACCACCCCTCTTCCTGTCACCGACACTTCCTCAGCATCCACAGGTCACGCCACCTCTCTT
rabbit   ------------------------------------------------------------

human    CCTGTCACCGACACTTCCTCAGCATCCACAGGTCACGCCACCCCTCTTCCTGACACCGAC
rabbit   ------------------------------------------------------------
```

```
human          ACTTCCTCAGCATCCACAGGTCACGCCACCCTTCTTCCTGTCACCGACACTTCCTCAGCA
rabbit         ------------------------------------------------------------

human          TCCATAGGTCACGCCACCTCTCTTCCTGTCACCGACACTTCCTCAATATCCACAGGTCAC
rabbit         ------------------------------------------------------------

human          GCCACCCCTCTTCATGTCACCAGCCCTTCCTCAGCATCCACCGGTCACGCCACCCCGCTT
rabbit         ------------------------------------------------------------

human          CCTGTCACCGACACTTCCTCAGCATCCACAGGTCACGCCAACCCTCTTCATGTCACCAGC
rabbit         ------------------------------------------------------------

human          CCTTCCTCAGCATCCACCGGTCACGCCACCCCGCTTCCTGTCACCGACACTTCCTCAGCA
rabbit         ------------------------------------------------------------

human          TCCACAGGTCACGCCACCCCTCTTCCTGTCACCAGCCTTTCCTCAGTATCCACAGGTGAC
rabbit         ------------------------------------------------------------

human          ACCACGCCTCTTCCTGTCACTAGCCCTTCCTCAGCATCCACAGGTCACACCACCCCTCTT
rabbit         ------------------------------------------------------------

human          CCTGTCACCGACACTTCCTCAGCATCCACAGGTCAGGCCACCGCTCTTCCTGTCACCAGC
rabbit         ------------------------------------------------------------

human          ACTTCCTCAGCATCCACAGGTGACACCACCCCTCTTCCTGTCACCGACACTTCCTCAGCA
rabbit         ------------------------------------------------------------
```

```
human          TCCACAGGTCAGGCCACCCCTCTTCCTGTCACCAGCCTTTCCTCAGTATCCACAGGTGAC
rabbit         ------------------------------------------------------------

human          ACCACGCCTCTTCCTGTCACTAGCCCTTCCTCAGCATCCACAGGTCACGCCACTCCTCTT
rabbit         ------------------------------------------------------------

human          CTTGTCACCGACGCTTCCTCAGCATCCACAGGTCAGGCCACCCCTCTTCCTGTCACCAGC
rabbit         ------------------------------------------------------------

human          CTTTCCTCAGTATCCACAGGTGACACCACGCCTCTTCCTGTCACTAGCCCTTCCTCAGCA
rabbit         ------------------------------------------------------------

human          TCCACCGGTCATGCCACCTCTCTTCCTGTCACCGACACTTCCTCAGCATCCACAGGTGAC
rabbit         ------------------------------------------------------------

human          ACCACCTCTCTTCCTGTCACCGACACTTCCTCAGCATACACAGGTGACACCACCTCTCTT
rabbit         ------------------------------------------------------------

human          CCTGTCACCGACACTTCCTCATCATCCACAGGTGACACCACCCCTCTTCTTGTCACCGAG
rabbit         ------------------------------------------------------------

human          ACTTCCTCAGTATCCACAGGTCACGCCACTCCTCTTCTTGTCACCGACGCTTCCTCAGCA
rabbit         ------------------------------------------------------------

human          TCCACAGGTCACGCCACCCCTCTTCATGTCACCAGCCCTTCCTCAGCATCCACAGGTGAC
rabbit         ------------------------------------------------------------
```

```
human    ACCACCCCTGTGCCTGTCACCGACACTTCCTCAGTATCCACAGGTCACGCCACCCCTCTT
rabbit   ------------------------------------------------------------

human    CCTGTCACCGGCCTTTCCTCAGCTTCCACAGGTGACACCACCCGTCTTCCTGTCACCGAC
rabbit   ------------------------------------------------------------

human    ATTTCCTCGGCATCCACAGGTCAGGCCACCCCTCTTCCTGTCACCAACACTTCCTCAGTA
rabbit   ------------------------------------------------------------

human    TCCACAGGTGACACCATGCCTCTTCCTGTCACTAGCCCTTCCTCAGCATCCACAGGTCAC
rabbit   ------------------------------------------------------------

human    GCCACCCCTCTTCCTGTCACCAGCACTTCCTCAGCATCCACCGGTCACGCCACCCCTGTT
rabbit   ------------------------------------------------------------

human    CCTGTCACCAGCACTTCCTCAGCATCTACAGGTCACACCACCCCTCTTCCTGTCACCGAC
rabbit   ------------------------------------------------------------

human    ACTTCCTCAGCATCCACAGGTGACACCACCCCTCTTCCTGTCACCAGCCCTTCCTCAGCA
rabbit   ------------------------------------------------------------

human    TCTACAGGTCACACCACCCCTCTTCATGTCACCATCCCTTCCTCAGCATCCACAGGTGAC
rabbit   ------------------------------------------------------------

human    ACCAGCACTCTTCCTGTCACCGGCGCTTCCTCAGCATCCACCGGTCACGCCACCCCTCTT
rabbit   ------------------------------------------------------------
```

```
human    CCTGTCACCGACACTTCCTCAGTATCCACCGGTCACGCCACGCCTCTTCCTGTCACCAGC
rabbit   ------------------------------------------------------------

human    CTTTCCTCAGTATCCACAGGTGACACCACCCCTCTTCCTGTCACCGACGCTTCCTCGGCA
rabbit   ------------------------------------------------------------

human    TCCACAGGTCAGGCCACCCCTCTTCCTGTCACCAGCCTTTCCTCAGTATCCACAGGTGAC
rabbit   ------------------------------------------------------------

human    ACCACCCCTCTTCTTGTCACCGACGCTTCCTCAGTATCCACAGGTCACGCCACCCCTCTT
rabbit   ------------------------------------------------------------

human    CCTGTCACCGACACTTCCTCAGCATCCACAGGTGACACCACCCGTCTTCCTGTCACGGAC
rabbit   ------------------------------------------------------------

human    ACTTCCTCAGCATCCACAGGTCAGGCCACCCCTCTTCCTGTCACCAGCCTTTCCTCAGTA
rabbit   ------------------------------------------------------------

human    TCCACAGGTGACACCACCCCTCTTCTTGTCACCGACGCTTCCTCAGTATCCACAGGTCAC
rabbit   ------------------------------------------------------------

human    GCCACCCCTCTTCCTGTCACCGACACTTCCTCAGCATCCACAGGTGACACCACCCGTCTT
rabbit   ------------------------------------------------------------

human    CCTGTCACGGACACTTCCTCAGCATCCACAGGTCAGGCCACCCCTCTTCCTGTCACCATC
rabbit   ------------------------------------------------------------
```

```
human    CCTTCCTCATCATCCTCAGGTCACACCACCCCTCTTCCTGTCACCAGCACTTCCTCAGTA
rabbit   ------------------------------------------------------------

human    TCTACAGGTCACGTCACCCCTCTTCATGTCACCAGCCCTTCCTCAGCATCCACAGGTCAC
rabbit   ------------------------------------------------------------

human    GTCACCCCTCTTCCTGTCACCAGCACTTCCTCAGCATCCACAGGTCACGCCACCCCTCTT
rabbit   ------------------------------------------------------------

human    CTTGTCACCGACGCTTCCTCAGTGTCCACAGGTCACGCCACGCCTCTTCCTGTCACCGAC
rabbit   ------------------------------------------------------------

human    GCTTCCTCAGCATCCACAGGTGACACCACCCCTCTTCCTGTCACCGACACTTCCTCAGCA
rabbit   ------------------------------------------------------------

human    TCCACAGGTCAGGCCACCCCTCTTCCTGTCACCAGCCTTTCCTCAGTATCCACAGGTGAC
rabbit   ------------------------------------------------------------

human    ACCACCCCTCTTCCTGTCACCGACGCTTCCTCAGCATCCACAGGTCACGCCACCCCTCTT
rabbit   ------------------------------------------------------------

human    CCTGTCACCATCCCTTCCTCAGTATCCACAGGTGACACCATGCCTCTTCCTGTCACTAGC
rabbit   ------------------------------------------------------------

human    CCTTCCTCAGCATCCACAGGTCACGCCACCCCTCTTCCTGTTACCGGCCTTTCCTCAGCT
rabbit   ------------------------------------------------------------
```

```
human    TCCACAGGTGACACCACCCCTCTTCCTGTCACCGACACTTCCTCAGCATCCACACGTCAC
rabbit   ------------------------------------------------------------

human    GCCACCCCTCTTCCTGTCACCGACACTTCCTCAGCTTCCACAGATGACACCACCCGTCTT
rabbit   ------------------------------------------------------------

human    CCTGTCACCGACGTTTCCTCGGCATCCACAGGACATGCCACCCCTCTTCCTGTCACCAGC
rabbit   ------------------------------------------------------------

human    ACTTCCTCAGCATCCACAGGTGACACCACCCCTCTTCCTGTCACCGACACTTCCTCAGTA
rabbit   ------------------------------------------------------------

human    TCCACAGGTCACGCCACCTCTCTTCCTGTCACCAGCCGTTCCTCAGCATCCACAGGTCAC
rabbit   ------------------------------------------------------------

human    GCCACCCCCCTTCCTGTCACCGACACTTCCTCAGTATCCACAGGTCACGCCACCCCTCTT
rabbit   ------------------------------------------------------------

human    CCTGTCACCAGCACTTCCTCAGTATCTACAGGTCACGCCACCCCTCTTCCTGTCACCAGC
rabbit   ------------------------------------------------------------

human    CCTTCCTCAGCATCCACAGGTCACGCCACCCCTGTTCCTGTCACCAGCACTTCCTCAGCA
rabbit   ------------------------------------------------------------

human    TCCACAGGTGACACCACCCCTCTTCCTGTCACCAATGCTTCCTCATTATCCACAGGTCAC
rabbit   ------------------------------------------------------------
```

```
human    GCCACCCCTCTTCATGTCACCAGCCCTTCCTCAGCATCCAGAGGTGACACCAGCACTCTT
rabbit   ------------------------------------------------------------

human    CCTGTCACCGATGCTTCCTCAGCATCCACCGGTCACGCCACCCCTCTTCCTCTCACCAGC
rabbit   ------------------------------------------------------------

human    CTTTCCTCAGTATCCACAGGTGACACCACGCCTCTTCCTGTCACCGACACTTCCTCTGCA
rabbit   ------------------------------------------------------------

human    TCCACAGGTCAGGCCACCCCTCTTCCTGTCACCAGCCTTTCCTCAGTATCCACAGGTGAC
rabbit   ------------------------------------------------------------

human    ACCACGCCTCTTCCTGTCACCATCCCTTCCTCAGCATCCTCAGGTCACACCACCTCTCTT
rabbit   ------------------------------------------------------------

human    CCTGTCACCGACGCTTCCTCAGTGTCCACAGGTCACGGCACCCCTCTTCCTGTCACCAGC
rabbit   ------------------------------------------------------------

human    ACTTCCTCAGCATCCACAGGTGACACCACCCCTCTTCCTGTCACCGACACTTCCTCAGCA
rabbit   ------------------------------------------------------------

human    TCCACAGGTCACGCCACCCCTCTTCCTGTCACCGACACTTCCTCAGCATCCACAGGTCAC
rabbit   ------------------------------------------------------------

human    GCCACCCCTCTTCCTGTCACCAGCCTTTCCTCAGTATCCACAGGTCACGCCACCCCTCTT
rabbit   ------------------------------------------------------------
```

```
human           GCTGTCAGCAGTGCTACCTCAGCTTCCACAGTATCCTCGGACTCCCCTCTGAAGATGGAA
rabbit          ---------------------------------CATCTTTGGGCTCCACAACGAAGACCGAA
                                                  *** * **.****.*:. *****  ***

human           ACACCAGGAATGACAACACCGTCACTGAAGACAGACGGTGGGAGACGCACAGCCACATCA
rabbit          ACATCAGGAATGATCCCAACCTCACTGTGGATAAATGGTGGGAGAAGCACAGCACTGTCA
                *** ********* ..**.* ******:.** *.* *********.*******.. .***

human           CCACCCCCCACAACCTCCCAGACCATCATTTCCACCATTCCCAGCACTGCCATGCACACC
rabbit          CCGCCCTCAACAACCTCCCTGACCCCTACGAACTCCACGCCCACCACATCCACAGGCTTC
                **.*** *.**********:****.  *  :.*:***  **** ***: *** . .*: *

human           CGCTCCACAGCTGCCCCCATCCCCATCCTGCCTG---------AGAGAGGAGTTTCCCTC
rabbit          CGTTCAACAACTCCCTCTGTCCCCGTCCAGCAGGGACAAGCGGGCCCAGGCGTCTCCCTC
                ** **.***.** ** * .*****.***:**. *         . .  ***.** ******

human           TTCCCCTATGGGGCAGGCGCCGGGGACCTGGAGTTCGTCAGGAGGACCGTGGACTTCACC
rabbit          TTTCCCTACGGGTCCAGCGTTGGAGACACGCCGTTCGTCAGGAGGACAGTGGACTTCACC
                ** ***** *** *..***  **.***. * .***************.************

human           TCCCCACTCTTCAAGCCGGCGACTGGCTTCCCCCTTGGCTCCTCTCTCCGTGATTCCCTC
rabbit          TCTCAGCTCTTCAAGCCCCGCATTGGCTTCCCCCTGGGCTCCTTTCTGCGAGATTCCCTC
                ** *..***********    * ************ ******* *** **:*********

human           TACTTCACAGACAATGGCCAGATCATCTTCCCAGAGTCAGACTACCAGATTTTCTCCTAC
rabbit          TACTTCACAGACAACGGCCAGATCATCTTCCCGGAGTCAGACAGCCAGATCTTCTCCTAC
                ************** *****************.*********:.****** *********

human           CCCAACCCACTCCCAACAGGCTTCACAGGCCGGGACCCTGTGGCCCTGGTGGCTCCGTTC
rabbit          CCCAATCCGCCTCGGCGAGGCTTCACAGCTTGGGACCCCGTGGCCGTGGTGGCTCCCTTC
                ***** **.*  * .. ***********   ******* ****** ********** ***

human           TGGGACGATGCTGACTTCTCCACTGGTCGGGGGACCACATTTTATCAGGAATACGAGACG
rabbit          TGGGACGATGCTGACTTCTCCATCCGTCGGGGAACCATATTTTACCAGGAATATGAGACA
                ***********************   *******.**** ****** ******** *****.
```

```
human           TTCTATGGTGAACACAGCCTGCTAGTCCAGCAGGCCGAGTCTTGGATTAGAAAGATGACA
rabbit          TTCTATAATGAACACAACCCGCTAGTCTGGCAGGTGGAGTCTTGGATTCGCCCAGTGGAC
                ******..********.** ******* .*****  ***********.*.....**...

human           AACAACGGGGGCTACAAGGCCAGGTGGGCCCTAAAGGTCACGTGGGTCAATGCCCACGCC
rabbit          CTTTGGGGTGAGTGGACCCATAGCAGCTCCCCTGGAGTGACCTGG----GAATCCCAGCA
                .: :. ** *. *. *.  . ** :*  *** :...** ** ***    .:. **..**.

human           TATCCTGCCCAGTGGACCCTCGGGAG-------CAACACCTACCAAGCCATCCTCTCCAC
rabbit          TTTGAAGCCAGGTGGACCAGGAACAGGTGATACCTGCACCTACCAGGCCATCCTCTCCAC
                *:* .:***..*******.  .. **       *:.*********.**************

human           GGACGGGAGCAGGTCCTATGCCCTGTTTCTCTACCAGAGCGGTGGGATGCAGTGGGACGT
rabbit          CGACGGGAGCACGTCCTACGCACTGTTTCTTTACCAGAGCAATGGGATGCAGTGGGATGT
                 ********** ****** **.******** *********..*************** **

human           GGCCCAGCGCTCAGGCAACCCGGTGCTCATGGGCTTCTCTAGTGGAGATGGCTATTTCGA
rabbit          AGCCCAGCGCCCAGGCAACTCGGTCCTCATGGGCTTCTCCAGTGCAGACGGGTATTTTGC
                .********* ******** **** ************** **** *** ** ***** *.

human           AAACAGCCCACTGATGTCCCAGCCAGTGTGGGAGAGGTATCGCCCTGATAGATTCCTGAA
rabbit          CAACAGCCCGCTGATTTCCCGGCCAGTGTGGGAGAGATATCGTCCGGACCGATGGCTGAA
                .********.***** ****.***************.***** ** ** .***  *****

human           TTCCAACTCAGGCCTCCAAGGGCTGCAGTTCTACAGGCTACACCGGGAAGAAAGGCCCAA
rabbit          TTCCAAACTAGGCCTCCGGGGGCTGCAGATCTACAGGCTCCACAGGGAGGCGATACCCAA
                ******.  ********..*********:**********.***.****.*.* .*****

human           CTACCGTCTCGAGTGCCTGCAGTGGCTGAAGAGCCAGCCTCGGTGGCCCAGCTGGGGCTG
rabbit          CTACTATCTCAAGTGCCAGCA----------------------------------------
                **** .****.******:***

human           GAACCAGGTCTCCTGCCCTTGTTCCTGGCAGCAGGGACGACGGGACTTACGATTCCAACC
rabbit          ----------------CCCTTGCACCTGGCAGCAGGGACGATGGGACTTACGATTCCGGCC
                              ****** :***************** **************..**
```

```
human           CGTCAGCATAGGTCGCTGGGGCCTCG---GCAGTAGGCAGCTGTGCAGCTTCACCTCTTG
rabbit          TGTGGGCTCAGGCTGGTGGGGCCATGGCGGCGGCCGGAAGCTGTGCCGCTTCTCCTCCTG
                 ** .**: ***  * *******: *   **.* .**.********.*****:**** **

human           GCGAGGAGGCGTGTGCTGCAGCTACGGGCCCTGGGGAGAGTTTCGTGAAGGCTGGCACGT
rabbit          GCAAGGAGGCGTGTGCTGCAGCTACGGGCCCTGGGGAGAGCTTCGCGAAGGCTGGGGAGT
                **.************************************ **** ********* ..**

human           GCAGCGTCCTTGGCAGTTGGCCCAGGAACTGGAGCCACAGAGCTGGTGCTGCCGCTGGAA
rabbit          GGACAGTCCTTGGCACTTTGAGCAGGAACTGGAGGCGCAGAACTGGTGCTGCCGCTGGAA
                * * .********** ** *.  ************ *.****.******************

human           TGACAAGCCCTACCTCTGTGCCCTGTACCAGCAGAGGCGGCCCCACGTGGGCTGTGCTAC
rabbit          CGACAAGCCCTCCTTCTGCTCGCTGTACAAGCGGAGGCGGCCGCCCGTCAGCTGTGCCGG
                 **********.* ****  * ******.***.********* *.*** .******* .

human           ATACAGGCCCCCACAGCCCGCCTGGATGTTCGGGGACCCCCACATCACCACCTTGGATGG
rabbit          ATACAGGCCCTCCAGGCCGGGTTGGATGTTTGGGGACCCCCACATCACCACCTTGGATGG
                ********** *...*** *  ******** ****************************

human           TGTCAGTTACACCTTCAATGGGCTGGGGGACTTCCTGCTGGTCGGGGCCCAAGACGGGAA
rabbit          CGCCAATTTCACCTTCAATGGTCTGGGGGACTTCCTGCTGGTCCGGGCCTGGGACGGGAA
                 * **.**:************ ********************** ***** ..********

human           CTCCTCCTTCCTGCTTCAGGGCCGCACCGCCCAGACTGGCTCAGCCCAGGCCACCAACTT
rabbit          CTCCTCCTTCCTGCTGCAAGGCCGCACTGCCCAGACCGGCTCCGCCCAGGCCACCAACTT
                *************** **.******** ******** *****.****************

human           CATCGCCTTTGCGGCTCAGTACCGCTCCAGCAGCCTGGGCCCCGTCACGGTCCAATGGCT
rabbit          CATTGCCTTTGCAGCTCAGTATGAGTCCAGCAGCCTGGCCCCCATCACGGTTCAATGGTT
                *** ********.********  .  ************** ****.******* ****** *

human           CCTTGAGCCTCACGACGCAATCCGTGTCCTGCTGGATAACCAGACTGTGACATTTCAGCC
rabbit          CCTGGAGCCCAATGACACAATCCGTGTGCTGCACAATAACCAGACTGTGACATTTGAAAC
                *** ***** .* ***.********** ****: .******************** *.*
```

```
human           TGACCATGAAGACGGCGGAGGCCAGGAGACGTTCAACGCCACCGGAGTCCTCCTGAGCCG
rabbit          CGACCTTGAAGATGCAGAAGGCCAGGAGATTTTCAACACCACCGGGGTGCTGCTGACCCG
                 ****:****** * .*.**********  ******.*******.** ** **** ***

human           CAACGGCTCTGAGGTCTCGGCCAGCTTCGACGGCTGGGCCACCGTCTCGGTGATCGCGCT
rabbit          CAACGGCTCTCAGGTCTCAGCCAGCTTTGATGGCACGGTGGCCATCTCGGTGATGGCTGT
                ********** *******.******** ** ***: **  .**.********** **  *

human           CTCCAACATCCTCCACGCCTCCGCCAGCCTCCCGCCCGAGTACCAGAACCGCACGGAGGG
rabbit          CTCCCACCTCCTCCACGCCTCCTCCAGCCTCCCAGAGGAGTACCAGGGCCGCACGGAGGG
                ****.**.************** **********. . *********..**********

human           GCTCCTGGGGGTCTGGAATAACAATCCAGAGGACGACTTCAGGATGCCCAATGGCTCCAC
rabbit          CCTCCTGGGGCTCTGGAACAACAATCCCGATGATGACTTCCGGATGCCCAATGGCACTTC
                 ********* ******* ********.** ** ******.**************:* :*

human           CATTCCCCCAGGGAGCCCTGAGGAGATGCTTTTCCACTTTGGAATGACCTGGCAGATCAA
rabbit          CGTGGCCCGCGGGAGCTCCGAGGAGCAGCTTTTCCACTATGGGATGACCTGGAAGCTCAA
                *.*  *** .****** * ******.:***********:***.*********.**.****

human           CGGGACAGGCCTCCTTGGCAAGAGGAATGACCAGCTGCCTTCCAACTTCACCCCTGTTTT
rabbit          CGGGACAGGCCTCCTTGGCCAGAGGGACGACCAGCTGCCTCCCACCTTCACCCCTGTCTT
                ******************.*****.* ************ ***.************ **

human           CTACTCACAACTGCAAAAAAACAGCTCCTGGGCTGAACATTTGATCTCCAACTGTGACGG
rabbit          CTTCTCCCAACTGCTGGACAACAGCTCTGGGGACCCGGCTCTGGTCTCTGGGTGCAGTGG
                **:***.*******:..*.********  ***.  .. .* **.**** .. ** .. **

human           AGATAGCTCATGCATCTATGACACCCTGGCCCTGCGCAACGCAAGCATCGGACTTCACAC
rabbit          AGACAGACAATGCATCTATGACGCCCTGGCCATGCGAGACGCCGGTGCAGGCATCCACAC
                *** **. .**************.*********.****..****..* . .**..* *****

human           GAGGGAAGTCAGTAAAAACTACGAGCAGGCGAACGCCACCCTCAATCAGTACCCGCCCTC
rabbit          CAGGACACTGTTTAGAACGTACCGGCAGATGAACGCCACCCAGAATCAGTTCCCGCCCTC
                 ***..* * : **.**. *** .****. ***********: *******:*********
```

```
human           CATCAATGGTGGTCGTGTGATTGAAGCCTACAAGGGGCAGACCACGCTGATTCAGTACAC
rabbit          CATCAAGGGCGAGCATGTGATTTGCGCCTATAAGGGGAAGAGCGTGTGGATTCCGTACAC
                ****** ** *. *.******* ..***** ******.*** *. *  *****.******

human           CAGCAATGCTGAGGATGCCAACTTCACGCTCAGAGACAGCTGCACCGACTTGGAGCTCTT
rabbit          CAGCGACTCGGAGAATGTCGTGTTCACGCTCAGAAACAACTGCACTGACATCAAGCTCTT
                ****.*  * ***.*** *.: **********.***.****** ***:* .*******

human           TGAGAATGGGACGTTGCTGTGGACACCCAAGTCGCTGGAGCCATTCACTCTGGAGATTCT
rabbit          CGAGAATGGCACATTGCTGTGGACCCCGAAGTCACTGGAACCGTTCACTCTGGAGATCCT
                 ******** **.**********.** *****.*****.**.************** **

human           AGCAAGAAGTGCCAAGATTGGCTTGGCATCTGCACTCCAGCCCAGGACTGTGGTCTGCCA
rabbit          AGTGAGAAGCACCAAGACGGGCCTCTCGTCTGCCTTCCAGCCCCAGACCGTGCTCTGCGC
                ** .***** .******  *** *  *.*****. ********..*** *** ***** .

human           TTGCAATGCAGAGAGCCAGTGTTTGTACAATCAGACCAGCAGGGTGGGCAACTCCTCCCT
rabbit          ATGCAGTGCAGAGAGCCAGTGTCTGTACAACCAGACCAGCTGGGTGGGCAATTCCTCCCT
                :****.**************** ******* *********:********** ********

human           GGAGGTGGCTGGCTGCAAGTGTGACGGGGGCACCTTCGGCCGCTACTGCGAGGGCTCCGA
rabbit          CCAGGTGGCTGACTGCAAGTGTGATGGGGACACCTTTGGCCGCTTCTGTGAGCGCTCCAA
                  *********.************ ****.****** *******:*** *** *****.*

human           GGATGCCTGTGAGGAGCCGTGCTTCCCGAGTGTCCACTGCGTTCCTGGGAAGGGCTGCGA
rabbit          GGACCCCTGTGAGGAGGAGTGCTTCCCTGGCGTGAGCTGCGTTCCTGAGCGAGGCTGCGA
                ***  ********** .********* .* ** ..**********.*...********

human           GGCCTGCCCTCCAAACCTGACTGGGGATGGGCGGCACTGTGCGGCTCTGGGGAGCTCTTT
rabbit          GGCCTGCCCCATAGACATGACCGGAGACGGGCGGCACTGTGCAGCCCTGGAGAACTCCGA
                ********* . *.**.**** **.** **************.** ****.**.***  :

human           CCTGTGTCAGAACCAGTCCTGCCCTGTGAATTACTGCTACAATCAAGGCCACTGCTACAT
rabbit          CCTCTGTCAGAACCACTCTTGCCCTGTGAATTACTGCCACAACCAGGGCCACTGCTACAT
                *** ********** ** ****************** **** **.**************
```

```
human           CTCCCAGACTCTGGGCTGTCAGCCCATGTGCACCTGCCCCCCAGCCTTCACTGACAGCCG
rabbit          TGCCCCGACGCTGAGCTGCCAGCCCTCCTGCACCTGCCCCCCAGCCTTCACTGACGCCCG
                  ***.*** ***.**** ******:  **************************. ***

human           CTGCTTCCTGGCTGGGAACAACTTCAGTCCAACTGTCAACCTAGAACTTCCCTTAAGAGT
rabbit          CTGCTTCCTGGCTGGGAATAGCTTCACTCCAACCACCCATCAAGAGCTTCCCTTAAGAAC
                ****************** *.***** ****** .  *.* *:***.***********.

human           CATCCAGCTCTTGCTCAGTGAAGAGGAAAATGCCTCCATGGCAGAAGTCAACGCCTCGGT
rabbit          CATCCAGCTCTTGCTCATCGAAGATGAAAATGCCTCCGTAGCAGAGGTCAACGCCTCGGT
                **********************  ***** ***********.*.*****.**********

human           GGCATACAGACTGGGGACCCTGGACATGCGGGCCTTTCTCCGCAACAGCCAAGTGGAACG
rabbit          GGCCTACAGGCTGGGGACCCTGGACGTGCGTGCCTTTCTCTGGAACAGCCTAGTGGAACC
                ***.*****.***************.**** ********* * *******:********

human           AATCGATTCTGCAGCACCGGCCTCGGGAAGCCCCATCCAACACTGGATGGTCATCTCGGA
rabbit          AATCGCCTCTCCGGCCCCCGGCTCGGGAAGCCTCATTCAGCGCTGGAAGGTCACCTCGCA
                *****.  *** *.**.** * ********** *** **.*.*****:***** **** *

human           GTTCCAGTACCGCCCTCGGGGCCCGGTCATTGACTTCCTGAACAACCAGCTGCTGGCCGC
rabbit          TTTCCAGTACCGGCCTCAGGGCCCTGTCATCGACTTCCTCAACAACCGGCTTCAGGAGGC
                 ********** ****.****** ***** ******** *******.*** *:**.  **

human           GGTGGTGGAGGCGTTCTTATACCACGTTCCACGGAGGAG----------TGAGGAGCC
rabbit          AGTGGTGCAGGCCTTCTTCCTGCAGGCTCAGAGGAGGAGGTGGAAGAGGAGCGAGGGGCC
                .****** **** *****. : ** * **...*******            ****.***

human           CAGGAACGACGTGGTCTTCCAGCCCATCTCCGGGGAAGACGTGCGCGATGTGACAGCCCT
rabbit          CAGGAACAACGTGCTCTTCTACCCCATCTCAAGGGTGGACGTGCATGATCTCGCAGCGCT
                *******.***** ***** * ********..***:.*******.  *** * .**** **

human           GAACGTGAGCACGCTGAAGGCTTACTTCAGATGCGATGGCTACAAGGGCTACGACCTGGT
rabbit          GAATGTGAGCACGCTGGAGACATACCTCAAATGCAATGGCTACGAGGGCTACCACCTGAT
                *** ************.**.*:*** ***.****.********.******** *****.*
```

```
human          CTACAGCCCCCAGAGCGGCTTCACCTGCGTGTCCCCGTGCAGTAGGGGCTACTGTGACCA
rabbit         CTACGGCCCCCAGAGCGGCTTCACCTGCACGTCCCCGTGCACCGAGGGCTACTGTGACCA
               ****.**********************. ***********  ..***************

human          TGGAGGCCAGTGCCAGCACCTGCCCAGTGGGCCCCGCTGCAGCTGTGTGTCCTTCTCCAT
rabbit         CG-AGGCCAGTGCCAGCACTGCCTGA--------------------------------
                * ***************   *  *

human          CTACACGGCCTGGGGCGAGCACTGTGAGCACCTGAGCATGAAACTCGACGCGTTCTTCGG
rabbit         ------------------------------------------------------------

human          CATCTTCTTTGGGGCCCTGGGCGGCCTCTTGCTGCTGGGGGTCGGGACGTTCGTGGTCCT
rabbit         ------------------------------------------------------------

human          GCGCTTCTGGGGTTGCTCCGGGGCCAGGTTCTCCTATTTCCTGAACTCAGCTGAGGCCTT
rabbit         ------------------------------------------------------------

human          GCCTTGAAGGGGCAGCTGTGGCCTAGGCTACCTCAAGACTCACCTCATCCTTACCGCACA
rabbit         ------------------------------------------------------------

human          TTTAAGGCGCCATTGCTTTTGGGAGACTGGAAAAGGGAAGGTGACTGAAGGCTGTCAGGA
rabbit         ------------------------------------------------------------

human          TTCTTCAAGGAGAATGAATACTGGGAATCAAGACAAGACTATACCTTATCCATAGGCGCA
rabbit         ------------------------------------------------------------

human          GGTGCACAGGGGGAGGCCATAAAGATCAAACATGCATGGATGGGTCCTCACGCAGACACA
rabbit         ------------------------------------------------------------
```

```
human           CCCACAGAAGGACACTAGCCTGTGCACGCGCGCGTGCACACACACACACACACACACGAG
rabbit          ------------------------------------------------------------

human           TTCATAATGTGGTGATGGCCCTAAGTTAAGCAAAATGCTTCTGCACACAAAACTCTCTGG
rabbit          ------------------------------------------------------------

human           TTTACTTCAAATTAACTCTATTTAAATAAAGTCTCTCTGACTTTTTGTGTCTCCAAAAAA
rabbit          ------------------------------------------------------------

human           AAAAAAAAAAA
rabbit          -----------
```

Underline fields are primer sequences we used.

**Supplemental Information 3.**

CLUSTAL 2.1 multiple sequence alignment

**Muc5ac**

```
human           GGGCACTCTTCCCCGCCGTCCACACAATGAGTGTTGGCCGGAGGAAGCTGGCCCTGCTCT
rabbit          ------------------------------------------------------------


human           GGGCCCTGGCTCTCGCTCTGGCCTGCACCCGGCACACAGGCCATGCCCAGGATGGCTCCT
rabbit          ------------------------------------------------------------


human           CCGAATCCAGCTACAAGCACCACCCTGCCCTCTCTCCTATCGCCCGGGGGCCCAGCGGGG
rabbit          ------------------------------------------------------------


human           TCCCGCTCCGTGGGGCGACTGTCTTCCCATCTCTGAGGACCATCCCTGTGGTACGAGCCT
rabbit          ----------------------CCTCCAATGGCCGCGG----TTGCTTCGGCCACAGCCC
                                     * *** **  * * **    *  **  **    ****


human           CCAACCCGGCGCACAACGGGCGGGTGTGCAGCACCTGGGGCAGCTTCCACTACAAGACCT
rabbit          CGGACCCCGTGCACAACGGCCGGGTGTGCAGCACCTGGGGCGACTTCCACTACAAGACCT
                *  **** * ********* **********************  ******************


human           TCGACGGCGACGTCTTCCGCTTCCCCGGCCTCTGCAACTACGTGTTCTCCGAGCACTGCG
rabbit          TCGACGGCGCCGTCTTCCGCTTCCCGGGCCTCTGCAACTACGTGTTCTCTGCGCACTGCG
                ********* *************** ********************** * ********


human           GTGCCGCCTACGAGGATTTTAACATCCAGCTACGCCGCAGCCAGGAGTCAGCGGCCCCCA
rabbit          GCGGCGCCTACGAGGACTTCAACGTGCAGCTGCGGCGCAGCCGGCAGGACGGCGCTGTGG
                * * ************ ** *** * ***** ** ******* * **   *  **


human           CGCTGAGCAGGGTCCTCATGAAGGTGGATGGCGTGGTCATCCAGCTGACCAAGGGCTCCG
rabbit          CCCCGAGCAGGGTCATCATGAAGCTGGAGGGCCTGGTGGTCGAGCTCACCAGTCACTCCG
                * * ********** ******** **** *** ****  ** **** ****    *****
```

```
human           TCCTGGTCAACGGCCACCCGGTCCTGCTGCCCTTCAGCCAGTCTGGGGTCCTCATTCAGC
rabbit          TCCTGGTCAGCGGCCGCCCGGTGCAGCTGCCCTTCAGCCAGGCGGGGGTTCTCATAGAGC
                ********* ***** ****** * ********** * ***** *****  ***

human           AGAGCAGCAGCTACACCAAGGTGGAGGCCAGGCTGGGCCTTGTCCTCATGTGGAACCACG
rabbit          GCAGCAGCAGCTCCCTGAAGGTGGTGGCCAAGCTGGGCCTGGTCTTCATGTGGAACCAGG
                  ********** *   ******* ***** ********* *** ************ *

human           ATGACAGCCTGCTGCTGGAGCTGGACACCAAATACGCCAACAAGACCTGTGGGCTCTGTG
rabbit          ACGACAGCCTCCTGCTGGAGCTGGACTCCAAGTTCGCCAACCAGACCTGCGGGCTCTGTG
                * ******** *************** **** * ******* ******* **********

human           GGGACTTCAACGGGATGCCCGTGGTCAGCGAGCTCCTCTCCCACAACACCAAGCTGACAC
rabbit          GAGACTTCAACGGCATCCCCGCGTCCAGCGAGTTCCTGTCCCACAACACCAGGCTGACCC
                * *********** ** **** *  ******* **** ************ ****** *

human           CCATGGAATTCGGGAACCTGCAGAAGATGGACGACCCCACGGAGCAGTGTCAGGACCCTG
rabbit          CCGTGGAGTTCGGGAACCTGCAGAAGCTGGATGGCCCCATGGAGCAGTGCCAGGACCCGG
                ** **** ***************** **** * ***** ********* ******** *

human           TCCCTGAACCCCCGAGGAACTGCTCCACTGGCTTTGGCATCTGTGAGGAGCTCCTGCACG
rabbit          CCCCAGAAAACAAGAGGAACTGCTCCAC-AGCCCCGGT---------GAGCCCCTGCGTG
                 *** ***  *  ***************  **   **          **** *****  *

human           GCCAG--CTGTTCTCTGGCTGCGTGGCCCTGGTGGACGTCGGCAGCTACCTGGAGGCTTG
rabbit          GAGGGGGCGGGGCGGGGGTTGCGGGGACCCTACG-----CGG--GGTGCCCCGAG-CTTG
                *   *  * * *   ** **** ** **    *     ***  * * **  *** ****

human           CAGGCAAGACCTCTGCTTCTGTGAAGACACCGACCTGCTCAGCTGCGTCTGCCACACCCT
rabbit          GACTCCAGAGC---GCTCCCGGGGC----CCGACCAGNCGACCT----CTGCCGT-----
                 *  * *** *   *** * * *      ****** *   * **    *****

human           TGCCGAGTACTCCCGGCAGTGCACCCATGCAGGGGGGT--TGCCCCAGGACTGGCGGGGC
rabbit          ----GAGTGCCCCCCGCCCGGCCCCAACCCGGCAGGCTGGCGCGCCCACGCCGGCGCAGC
                    **** * *** **   ** ** *  * *  ** *   ** **    * ****  **
```

```
human           CCTGACTTCTGCCCCCAGAAGTGCCCCAACAACATGCAGTACCACGAGTGCCGCTCCCCC
rabbit          CCTGAC--------------GTGTCCCCACGACATGGAATACCACGAGTGCCGCTCACCC
                ******              *** *** ** ***** * ***************** ***

human           TGTGCAGACACCTGCTCCAACCAGGAGCACTCCCGGGCCTGTGAGGACCACTGTGTGGCC
rabbit          TGCGCCGACACCTGCTCCAACCCCGAGCGCTCCCAGCTCTGCGAGGACCACTGCGTGGCC
                ** ** ****************  **** ***** *  *** ********** ******

human           GGCTGCTTCTGCCCTGAGGGGACGGTGCTTGACGACATCGGCCAGACCGGCTGTGTCCCT
rabbit          GGCTGCTTCTGCCCCGAGGGGACGGTGCTGGACGACATCGGCCAGGCCGGCTGTGTCCCC
                ************** ************** ************** *************

human           GTGTCAAAGTGTGCCTGCGTCTACAACGGGGCTGCCTATGCCCCAGGGGCCACCTACTCC
rabbit          GTGACCCAGTGCGCCTGCACCTACAACGGGGCCACCTACGCGTCAGGAGCCAAATACTCC
                *** *  **** ******  ************  **** **  **** ****  ******

human           ACAGACTGCACCAACTGCACCTGCTCCGGAGGCCGGTGGAGCTGCCAGGAGGTTCCATGC
rabbit          ACAGACTGCACCGAGTGCACCTGCTCCGGAGGCCGCTGGAGCTGCCAGGACATCCCATGT
                ************ * ******************** **************  * *****

human           CCGGGTACCTGCTCTGTGCTTGGAGGTGCCCACTTCTCAACGTTTGACGGGAAGCAATAC
rabbit          CCAGGCACCTGCTCGGTGCTGGGGGGCGCCCACTTCTCCACGTTCGACGAGAGGCAGTAC
                ** ** ******** ***** ** ** *********** ***** **** ** *** ***

human           ACGGTGCACGGCGACTGCAGCTATGTGCTGACCAAGCCCTGTGACAGCAGTGCCTTCACT
rabbit          ACGGTGCACGGGGACTGCAGCTACGTGCTGGCCAAGTCCTGTAACAGCAGCACCTTCACC
                *********** *********** ****** ***** ***** *******  *******

human           GTACTGGCTGAGCTGCGCAGGTGCGGGCTGACGGACAGCGAGACCTGCCTGAAGAGCGTG
rabbit          GTGCTGGCGGAGCTGCGCAGGTGCGGGCTGACGGACAGCGAGACCTGCCTGAAGAGCGTG
                ** ***** **************************************************

human           ACACTGAGCCTGGATGGGGTGCAGACGGTGGTGGTGATCAAGGCCAGTGGGGAAGTGTTC
rabbit          ACGCTGAACCTGGACGGGGGGCAGACGGTCGTGGTGGTCAAGGCCAGCGGGGAGGTGTTT
                ** **** ****** **** ********* ****** ********** ***** *****
```

```
human          CTGAACCAGATCTACACCCAGCTGCCCATCTCTGCAGCCAACGTCACCATCTTCAGACCC
rabbit         GTGAACCATATCTACACCCAGCTGCCTGTCTCCGCAGGTGAG------------------
                ******* *****************  **** ****   *

human          TCAACCTTCTTCATCATCGCCCAGACCAGCCTGGGCCTGCAGCTGAACCTGCAGCTGGTG
rabbit         ------------------------------CTGGGCCTGCAGTTGGACATCCAGCTGGTG
                                             *********** ** ** * *********

human          CCCACCATGCAGCTGTTCATGCAGCTGGCGCCCAAGCTCCGTGGGCAGACCTGCGGTCTC
rabbit         CCCACCATGCAGGTGGCTGTGAGGCTGGAGCCCGAGTTCAGGGGCCGGACCTGCGGTCTC
               *********** **    **  ***** **** ** ** * ** * *************

human          TGTGGGAACTTCAACAGCATCCAGGCCGATGACTTCCGGACCCTCAGTGGGGTGGTGGAG
rabbit         TGCGGGAATTTCAACCGCGTGCAGGCAGACGACTTCCGGGCCATCAGCGGTGTGGTGGAG
               ** ***** ****** ** * ***** ** ********* ** **** ** *********

human          GCCACCGCTGCGGCCTTCTTCAACACCTTCAAGACCCAGGCCGCCTGCCCCAACATCAGG
rabbit         GGCACGGCCGCCGCCTTCTTCAACACCTTCAAGACCCATGCCTCCTGCCCCAACGTCAAG
               * *** ** ** ************************* *** *********** *** *

human          AACAGCTTCGAGGACCCCTGCTCTCTGAGCGTGGAGAATGAGAAGTATGCTCAGCACTGG
rabbit         AACAACTTCGAGGACCCCTGCTCCCTCAGCGTGGAGAACGAGAAGTTTGCCCAGCACTGG
               **** ****************** ** *********** ******* *** *********

human          TGCTCGCAGCTGACCGATGCCGACGGCCCCTTCGGCCGGTGCCATGCTGCCGTGAAGCCG
rabbit         TGCTCGCGGCTGACAGACGCCCAAGGCCCCTTTGCCCAGTGCCACTCCGCCGTGAGCCCT
               ******* ****** ** *** * ******** * ** ******  * *******  **

human          GGCACCTACTACTCGAACTGCATGTTTGACACCTGCAACTGTGAGCGGAGCGAGGACTGC
rabbit         GGCACCTACCACTCGAACTGCCTGTTTGACACCTGCAACTGTGAGAAGACTGAGGACTGC
               ********* ********** ************************  **  *********

human          CTGTGCGCCGCGCTGTCCTCCTACGTGCACGCCTGTGCCGCCAAGGGCGTGCAGCTCGGC
rabbit         CTGTGTGCGGCGCTGGCCTCCTACGTGCGCGCCTGCGCCGCCAAGGGCGTGCTGCTCCGT
               ***** ** ****** ********** ****** *************** **** *
```

```
human           GGCTGGAGGGACGGCGTCTGCACGAAGCCTATGACCACTTGCCCCAAGTCAATGACGTAC
rabbit          GGCTGGCGGGACGGCGTCTGCACCAAGCACACGAGCAGCTGCCCCAAGTCCATGACCTAC
                ****** ********************  * ** **  ********** ***** ***

human           CACTACCATGTCAGCACCTGCCAGCCCACCTGCCGCTCCCTGAGCGAGGGGGACATCACC
rabbit          CACTACCACATCAGCACCTGCCAGCCCACCTGCCGCGCCCGGAGCGAGCCCGACCTCACC
                ********  ************************** *** *******   *** *****

human           TGCAGTGTTGGCTTCATCCCCGTGGATGGCTGCATCTGTCCCAAGGGCACCTTCCTGGAC
rabbit          TGCGGCGTCAGCTTCGTGCCCGTGGACGGCTGCGCCTGCCCCGAGGGCACCTTCCTGGAC
                *** * **  ***** * ******** ******  *** *** ****************

human           GACACGGGCAAGTGTGTGCAGGCCAGCAACTGTCCCTGCTACCACAGAGGCTCCATGATC
rabbit          GACGTGGGCAAGTGTGTGGAGGCCACCAGCTGTCCCTGCTACCACAGCGGCTCCGTGGTC
                ***  ************** ****** ** ****************** ****** ** **

human           CCCAATGGGGAGTCGGTGCACGACAGCGGGGCTATCTGCACCTGCACACATGGGAAGCTG
rabbit          CCCAACGGCGAGTCTGTGCATGACAGTGGGGCCGTCTGCACCTGCACACAGGGGACGCTG
                ***** ** ***** ***** ***** *****  *************** **** ****

human           AGCTGCATCGGAGGCCAAGCCCCCGCCCCAGTGTGTGCTGCGCCCATGGTGTTCTTTGAC
rabbit          ACCTGCATTGGAGGCCCAGCTCCGGCCCCAGTGTGTGACGCACCCATGGTCTTCTTCGAC
                * ****** ******* *** ** **************  ** ******** ***** ***

human           TGCCGAAATGCCACGCCCGGGGACACAGGGGCTGGCTGTCAGAAGAGCTGCCACACACTG
rabbit          TGCCGCAACGCCACGGCCGGGGCCACGGGGGCTGGCTGTCAGAAGAGCTGTCACACCCTG
                ***** ** ****** ****** *** ********************** ***** ***

human           GACATGACCTGTTACAGCCCCCAGTGTGTGCCTGGCTGTGTGTGCCCCGATGGGCTGGTG
rabbit          GACATGGAGTGTTACAGCTCCCAGTGCGTGCCCGGCTGCGTGTGCCCCGACGGGCTGGTG
                ******   ********* ******* ***** ***** ********** *********

human           GCGGATGGCGAGGGCGGCTGCATCACTGCGGAGGACTGCCCCTGCGTGCACAATGAGGCC
rabbit          GCCGACGGCCTCGGCGGCTGCATCGCTGAGGAAGAATGTCCCTGTGTGCACAACGAGGCC
                ** ** ***   ************ *** *** ** ** ***** ******** ******
```

```
human           AGCTACCGGGCCGGCCAGACCATCCGGGTGGGCTGCAACACCTGCACCTGTGACAGCAGG
rabbit          AGCTACGGCCCCGGAGAGACCATCTGGACGGGGTGCAACACCTGCACCTGTGAGAACAGG
                ****** *  ****  ******** **  *** ******************** * ****

human           ATGTGGCGGTGCACAGATGACCCCTGCCTGGCCACCTGCGCCGTGTACGGGGACGGCCAC
rabbit          AAGTGGCGCTGCTCGGACGAGCCCTGCCTGGCCACCTGCGCCGTATACGGG-ACGGTCAC
                * ****** *** * ** ** ********************** ****** **** ***

human           TACCTCACCTT-CGACGGACAGAGCTACAGCTTCAACGGAGACTGCGAGTACACGCTGGT
rabbit          TACTTCACCTTTCGACGG---GGGCTACAGCTTCAGTGGTGACTGCGAGTACACGCTGTT
                *** ******* ******   * ************  ** ****************** *

human           GCAGAACCACTGTGGCGGGAAAGACAGCACCCAGGACTCCTTTCGTGTTGTCACCGAGAA
rabbit          GCAGGACCAGTGCGGTGGGAACGTCAGCGCCCAGGACGCCTTCCGCGTCGTCACGGAGAA
                **** **** ** ** ***** * **** ******** **** ** ** ***** *****

human           CGTCCCCTGCGGCACCACAGGGACCACCTGCTCCAAGGCCATCAAGATTTTCCTGGGGGG
rabbit          CGTCCCCTGCGGCACCACAGGGACCACCTGCTCCAAGGCCATCAAGATCTTCCTGGGGAG
                ********************************************** ********* *

human           CTTCGAGCTGAAGCTAAGCCATGGGAAGGTGGAGGTGATCGGGACGGACGAGAGCCAGGA
rabbit          CTACGAGCTGAAGCTGAGTGACGGGAAGGTGGAGGTGGTGGAGAAAGGCAAGGGCCAGGA
                ** ************ **  * *************** * * **  * * ** *******

human           GGTGCCATACACCATCCGGCAGATGGGCATCTACCTGGTGGTGGACACCGACATTGGCCT
rabbit          GCCGCCCTACTCCATCCGCCAGATGGGCATCTTCCTGGTGCTGGACACCGACGCTGGCCT
                *  *** *** ******* ************* ******* ***********  ******

human           GGTGCTGCTGTGGGACAAGAAGACCAGCATCTTCATCAACCTCAGCCCCGAGTTCAAGGG
rabbit          GGTGCTGCTGTGGGACAGGAGGACCAGCCTCTTCCTCAGGCTCAGCCCCGAGTTCAAGGG
                ****************** ** ******* ***** ***  ********************

human           CAGGGTCTGCGGCCTGTGTGGGAACTTCGACGACATCGCCGTTAATGACTTTGCCACGCG
rabbit          CAGGGTCTGTGGCCTGTGCGGGAACTTCGACGACAACGCCATGAACGACTTCACCACGCG
                ********* ******** **************** **** * ** *****  *******
```

```
human           GAGCCGGTCTGTGGTGGGGGACGTGCTGGAGTTTGGGAACAGCTGGAAGCTCTCCCCCTC
rabbit          GAGCCAGTCGGTGGTGGGCGACGCGCTGGAGTTCGGGAACAGCTGGAAGTTCTCGCCATC
                ***** *** ******** **** ********* ********************** ** **

human           CTGCCCAGATGCCCTGGCGCCCAAGGACCCCTGCACGGCCAACCCCTTCCGCAAGTCCTG
rabbit          CTGCCCGGACGCGCCGGCACCCAGGGACTCCTGCGCCGCCAACCCCTACCGCAAGTCCTG
                ****** ** ** * *** **** **** ***** * ********** ************

human           GGCCCAGAAGCAGTGCAGCATCCTCCACGGCCCCACCTTCGCCGCCTGCCACGCACACGT
rabbit          GGCCCAGAAGCAGTGCAGCATCGTCCACAGCGCCACCTTCGCTGCCTGCCACGCCCACGT
                ********************** ***** ** ********** *********** *****

human           GGAGCCGGCCAGGTACTACGAGGCCTGCGTGAACGACGCGTGCGCCTGCGACTCCGGGGG
rabbit          GGAGCCTGCCGAGTACTATGAGGCCTGCGTGCAGGACGCCTGCGCCTGCGACTCGGGCGG
                ****** ***  ****** ************ * ***** ************** ** **

human           TGACTGCGAGTGCTTCTGCACGGCTGTGGCCGCCTACGCCCAGGCCTGCCATGAAGTAGG
rabbit          CGACTGCGAGTGCTTCTGCACGGCCGTGGCCGCCTACGCCCAGGCCTGCCACGAGGTGGG
                 ********************** ************************** ** ** **

human           CCTGTGTGTGTCCTGGCGGACCCCGAGCATCTGCCCTCTGTTCTGCGACTACTACAACCC
rabbit          CGTGTGCGTGTCCTGGAGGAGCCCCGACGTGTGCCCGCTGTTCTGTGACTTCTACAAAAA
                * **** ********* *** ***   * * ***** ******** **** ******

human           CGAAGGCCAGTGCGAGTGGCACTACCAGCCCTGCGGGGTGCCCTGCCTGCGCACCTGCCG
rabbit          CGAGGGCCAGTGCGAGTGGCACTACCAGCCCTGCGGGGCGCCCTGCATGCGGACGTGCCG
                *** ********************************** ******* **** ** *****

human           GAACCCCCGTGGAGACTGCCTGCGGGACGTCTGGGGCCTGGAAGGCTGCTACCCCAAGTG
rabbit          GAACCCCAGTGGAGAGTGC-----------------------------------------
                ******* ******* ***

human           CCCACCAGAGGCTCCCATCTTTGATGAGGACAAGATGCAGTGTGTGGCCACCTGCCCAAC
rabbit          ----------------------------------------------------------
```

```
human    CCCGCCTCTGCCACCACGGTGCCACGTCCATGGGAAGTCCTACCGGCCAGGTGCAGTGGT
rabbit   ------------------------------------------------------------

human    GCCCTCGGACAAGAACTGCCAGTCCTGCCTTTGTACGGAGCGCGGCGTGGAGTGCACCTA
rabbit   ------------------------------------------------------------

human    CAAAGCTGAGGCCTGTGTCTGCACCTACAATGGACAGCGCTTCCACCCAGGGGACGTCAT
rabbit   ------------------------------------------------------------

human    CTACCACACGACGGATGGCACGGGTGGCTGCATCTCCGCCCGCTGCGGGGCCAACGGCAC
rabbit   ------------------------------------------------------------

human    CATTGAGAGGAGGGTCTACCCCTGCAGCCCCACCACCCCTGTCCCCCCAACCACCTTCTC
rabbit   ------------------------------------------------------------

human    CTTCTCCACACCCCCGCTTGTCGTGAGCTCCACGCACACCCCCAGCAATGGCCCAAGCAG
rabbit   ------------------------------------------------------------

human    CGCGCACACAGGCCCTCCGAGCAGCGCCTGGCCCACCACAGCAGGCACTTCTCCCAGGAC
rabbit   ------------------------------------------------------------

human    GAGGCTGCCCACAGCCTCTGCCTCACTGCCGCCGGTCTGTGGGGAAAAGTGCCTGTGGTC
rabbit   ------------------------------------------------------------

human    GCCATGGATGGATGTCAGCCGCCCTGGACGGGGCACGGACAGCGGTGACTTCGACACACT
rabbit   ------------------------------------------------------------
```

```
human          GGAGAACCTCCGCGCCCATGGGTACCGGGTGTGCGAATCACCCAGGTCGGTGGAGTGCCG
rabbit         ------------------------------------------------------------

human          AGCTGAGGACGCCCCCGGAGTGCCGCTCCGAGCCCTGGGGCAGCGTGTGCAGTGCAGCCC
rabbit         ------------------------------------------------------------

human          GGATGTGGGGCTGACCTGTCGTAACAGGGAGCAGGCATCGGGGCTCTGCTACAACTACCA
rabbit         ------------------------------------------------------------

human          GATCAGGGTCCAGTGCTGCACGCCCCTAGCCTGCTCCACCTCTAGCAGTCCAGCCCAGAC
rabbit         ------------------------------------------------------------

human          CACTCCTCCAACTACCTCCAAGACCACTGAAACCCGGGCCTCAGGCTCCTCAGCTCCCAG
rabbit         ------------------------------------------------------------

human          CAGCACACCTGGCACCGTGTCTCTCTCTACAGCCAGGACGACACCTGCCCCAGGTACCGC
rabbit         ------------------------------------------------------------

human          TACCTCTGTCAAAAAAACTTTCTCAACTCCCAGCCCTCCGCCAGTGCCGGCAACATCAAC
rabbit         ------------------------------------------------------------

human          ATCATCCATGTCGACCACGACCCCGGGGACCTCTGTGGTCTCCAGCAAGCCCACCCTCAC
rabbit         ------------------------------------------------------------

human          TGAGCCCAGCACATCCTCCTGCCTGCAGGAGCTTTGCACCTGGACCGAGTGGATCGATGG
rabbit         ------------------------------------------------------------
```

```
human          CAGCTACCCTGCTCCTGGAATAAATGGTGGAGATTTTGACACATTTCAAAATTTGAGAGA
rabbit         ------------------------------------------------------------

human          CGAAGGATACACATTCTGTGAAAGTCCTCGAAGCGTGCAGTGCCGGGCAGAGAGCTTCCC
rabbit         ------------------------------------------------------------

human          CAACACGCCGCTGGCAGACCTGGGGCAGGACGTCATCTGCAGCCACACAGAGGGGCTGAT
rabbit         ------------------------------------------------------------

human          TTGCCTGAACAAGAACCAGCTCCCACCCATCTGCTACAACTATGAGATCCGCATCCAGTG
rabbit         ------------------------------------------------------------

human          TTGCGAGACGGTGAACGTGTGCAGAGACATCACCAGACCGCCAAAGACCGTCGCAACGAC
rabbit         ------------------------------------------------------------

human          ACGGCCGACTCCACATCCAACCGGAGCTCAGACCCAGACCACCTTCACCACACACATGCC
rabbit         ------------------------------------------------------------

human          CTCGGCCTCCACAGAGCAACCCACGGCAACCTCCAGGGGTGGGCCCACAGCAACCAGCGT
rabbit         ------------------------------------------------------------

human          CACACAGGGCACCCACACCACACCAGTCACCAGAAACTGTCATCCCCGGTGCACCTGGAC
rabbit         ------------------------------------------------------------

human          AAAGTGGTTCGACGTGGACTTCCCGTCCCCCGGACCCCATGGTGGAGACAAGGAAACCTA
rabbit         ------------------------------------------------------------
```

```
human           CAACAACATCATCAGGAGTGGGGAAAAAATCTGCCGCCGACCTGAGGAGATCACCAGGCT
rabbit          ------------------------------------------------------------

human           CCAGTGCCGAGCCAAGAGCCACCCAGAGGTGAGCATCGAACACCTGGGCCAGGTGGTGCA
rabbit          ------------------------------------------------------------

human           GTGCAGCCGGGAAGAGGGCCTGGTGTGCCGGAACCAGGACCAGCAGGGACCCTTCAAGAT
rabbit          ------------------------------------------------------------

human           GTGCCTCAACTACGAGGTGCGTGTGCTCTGCTGCGAGACCCCCAGAGGCTGCCCCGTGAC
rabbit          ------------------------------------------------------------

human           CTCCACACCTGTGACAGCTCCTAGCACCCCTAGTGGGAGAGCCATCAGCCCAACTCAGAG
rabbit          ------------------------------------------------------------

human           CACCTCCTCTTGGCAGAAATCCAGGACAACCACTTTGGTGACAACCAGCACAACCTCCAC
rabbit          ------------------------------------------------------------

human           TCCACAGACCAGTACAACCTATGCCCATACAACCAGCACAACCTCTGCTCCTACAGCCAG
rabbit          ------------------------------------------------------------

human           AACAACCTCTGCTCCTACAACCAGAACAACCTCTGCCTCTCCAGCCAGCACAACCTCTGG
rabbit          ------------------------------------------------------------

human           TCCTGGAAATACTCCCAGCCCTGTTCCTACCACCAGCACAATCTCTGCTCCTACAACTAG
rabbit          ------------------------------------------------------------
```

human CATAACCTCTGCCCCTACAACCAGCACAACCTCTGCCCCTACAAGCAGCACAACCTCTGC

rabbit ----------

human TCCTACAACCAGCACAACCTCTGCCCCTACAAGCAGCACAACCTCCAGTCCACAGACCAG

rabbit ----------

human CACAACCTCGGCTCCTACAACCAGCACAACTTCTGGTCCTGGAACTACCCCAAGCCCTGT

rabbit ----------

human TCCCACGACCAGC

rabbit -------------

Underline fields are primer sequences we used.

**Supplemental Information 4.**

CLUSTAL 2.1 multiple sequence alignment

**Muc16**

```
human           AAGCGTTGCACAATTCCCCCAACCTCCATACATACGGCAGCTCTTCTAGACACAGGTTTT
rabbit          ------------------------------------------------------------

human           CCCAGGTCAAATGCGGGGACCCCAGCCATATCTCCCACCCTGAGAAATTTTGGAGTTTCA
rabbit          ------------------------------------------------------------

human           GGGAGCTCAGAAGCTCTGCAGAGGCCACCCTCTCTGAGGGGATTCTTCTTAGACCTCCAT
rabbit          ------------------------------------------------------------

human           CCAGAGGCAAATGTTGACCTGTCCATGCTGAAACCCTCAGGCCTTCCTGGGTCATCTTCT
rabbit          ------------------------------------------------------------

human           CCCACCCGCTCCTTGATGACAGGGAGCAGGAGCACTAAAGCCACACCAGAAATGGATTCA
rabbit          ------------------------------------------------------------

human           GGACTGACAGGAGCCACCTTGTCACCTAAGACATCTACAGGTGCAATCGTGGTGACAGAA
rabbit          ------------------------------------------------------------

human           CATACTCTGCCCTTTACTTCCCCAGATAAGACCTTGGCCAGTCCTACATCTTCGGTTGTG
rabbit          ------------------------------------------------------------

human           GGAAGAACCACCCAGTCTTTGGGGGTGATGTCCTCTGCTCTCCCTGAGTCAACCTCTAGA
rabbit          ------------------------------------------------------------
```

```
human    GGAATGACACACTCCGAGCAAAGAACCAGCCCATCGCTGAGTCCCCAGGTCAATGGAACT
rabbit   ------------------------------------------------------------

human    CCCTCTAGGAACTACCCTGCTACAAGCATGGTTTCAGGATTGAGTTCCCCAAGGACCAGG
rabbit   ------------------------------------------------------------

human    ACCAGTTCCACAGAAGGAAATTTTACCAAAGAAGCATCTACATACACACTCACTGTAGAG
rabbit   ------------------------------------------------------------

human    ACCACAAGTGGCCCAGTCACTGAGAAGTACACAGTCCCCACTGAGACCTCAACAACTGAA
rabbit   ------------------------------------------------------------

human    GGTGACAGCACAGAGACCCCCTGGGACACAAGATATATTCCTGTAAAAATCACATCTCCA
rabbit   ------------------------------------------------------------

human    ATGAAAACATTTGCAGATTCAACTGCATCCAAGGAAAATGCCCCAGTGTCTATGACTCCA
rabbit   ------------------------------------------------------------

human    GCTGAGACCACAGTTACTGACTCACATACTCCAGGAAGGACAAACCCATCATTTGGGACA
rabbit   ------------------------------------------------------------

human    CTTTATTCTTCCTTCCTTGACCTATCACCTAAAGGGACCCCAAATTCCAGAGGTGAAACA
rabbit   ------------------------------------------------------------

human    AGCCTGGAACTGATTCTATCAACCACTGGATATCCCTTCTCCTCTCCTGAACCTGGCTCT
rabbit   ------------------------------------------------------------
```

```
human    GCAGGACACAGCAGAATAAGTACCAGTGCGCCTTTGTCATCATCTGCTTCAGTTCTCGAT
rabbit   ------------------------------------------------------------

human    AATAAAATATCAGAGACCAGCATATTCTCAGGCCAGAGTCTCACCTCCCCTCTGTCTCCT
rabbit   ------------------------------------------------------------

human    GGGGTGCCCGAGGCCAGAGCCAGCACAATGCCCAACTCAGCTATCCCTTTTTCCATGACA
rabbit   ------------------------------------------------------------

human    CTAAGCAATGCAGAAACAAGTGCCGAAAGGGTCAGAAGCACAATTTCCTCTCTGGGGACT
rabbit   ------------------------------------------------------------

human    CCATCAATATCCACAAAGCAGACAGCAGAGACTATCCTTACCTTCCATGCCTTCGCTGAG
rabbit   ------------------------------------------------------------

human    ACCATGGATATACCCAGCACCCACATAGCCAAGACTTTGGCTTCAGAATGGTTGGGAAGT
rabbit   ------------------------------------------------------------

human    CCAGGTACCCTTGGTGGCACCAGCACTTCAGCGCTGACAACCACATCTCCATCTACCACT
rabbit   ------------------------------------------------------------

human    TTAGTCTCAGAGGAGACCAACACCCATCACTCCACGAGTGGAAAGGAAACAGAAGGAACT
rabbit   ------------------------------------------------------------

human    TTGAATACATCTATGACTCCACTTGAGACCTCTGCTCCTGGAGAAGAGTCCGAAATGACT
rabbit   ------------------------------------------------------------
```

```
human    GCCACCTTGGTCCCCACTCTAGGTTTTACAACTCTTGACAGCAAGATCAGAAGTCCATCT
rabbit   ------------------------------------------------------------

human    CAGGTCTCTTCATCCCACCCAACAAGAGAGCTCAGAACCACAGGCAGCACCTCTGGGAGG
rabbit   ------------------------------------------------------------

human    CAGAGTTCCAGCACAGCTGCCCACGGGAGCTCTGACATCCTGAGGGCAACCACTTCCAGC
rabbit   ------------------------------------------------------------

human    ACCTCAAAAGCATCATCATGGACCAGTGAAAGCACAGCTCAGCAATTTAGTGAACCCCAG
rabbit   ------------------------------------------------------------

human    CACACACAGTGGGTGGAGACAAGTCCTAGCATGAAAACAGAGAGACCCCCAGCATCAACC
rabbit   ------------------------------------------------------------

human    AGTGTGGCAGCCCCTATCACCACTTCTGTTCCCTCAGTGGTCTCTGGCTTCACCACCCTG
rabbit   ------------------------------------------------------------

human    AAGACCAGCTCCACAAAAGGGATTTGGCTTGAAGAAACATCTGCAGACACACTCATCGGA
rabbit   ------------------------------------------------------------

human    GAATCCACAGCTGGCCCAACCACCCATCAGTTTGCTGTTCCCACTGGGATTTCAATGACA
rabbit   ------------------------------------------------------------

human    GGAGGCAGCAGCACCAGGGGAAGCCAGGGCACAACCCACCTACTCACCAGAGCCACAGCA
rabbit   ------------------------------------------------------------
```

```
human    TCATCTGAGACATCCGCAGATTTGACTCTGGCCACGAACGGTGTCCCAGTCTCCGTGTCT
rabbit   ------------------------------------------------------------

human    CCAGCAGTGAGCAAGACGGCTGCTGGCTCAAGTCCTCCAGGAGGGACAAAGCCATCATAT
rabbit   ------------------------------------------------------------

human    ACAATGGTTTCTTCTGTCATCCCTGAGACATCATCTCTACAGTCCTCAGCTTTCAGGGAA
rabbit   ------------------------------------------------------------

human    GGAACCAGCCTGGGACTGACTCCATTAAACACTAGACATCCCTTCTCTTCCCCTGAACCA
rabbit   ------------------------------------------------------------

human    GACTCTGCAGGACACACCAAGATAAGCACCAGCATTCCTCTGTTGTCATCTGCTTCAGTT
rabbit   ------------------------------------------------------------

human    CTTGAGGATAAAGTGTCAGCGACCAGCACATTCTCACACCACAAAGCCACCTCATCTATT
rabbit   ------------------------------------------------------------

human    ACCACAGGGACTCCTGAAATCTCAACAAAGACAAAGCCCAGCTCAGCCGTTCTTTCCTCC
rabbit   ------------------------------------------------------------

human    ATGACCCTAAGCAATGCAGCAACAAGTCCTGAAAGAGTCAGAAATGCAACTTCCCCTCTG
rabbit   ------------------------------------------------------------

human    ACTCATCCATCTCCATCAGGGGAAGAGACAGCAGGGAGTGTCCTCACTCTCAGCACCTCT
rabbit   ------------------------------------------------------------
```

```
human    GCTGAGACTACAGACTCACCTAACATCCACCCAACTGGGACACTGACTTCAGAATCGTCA
rabbit   ------------------------------------------------------------

human    GAGAGTCCTAGCACTCTCAGCCTCCCAAGTGTCTCTGGAGTCAAAACCACATTTTCTTCA
rabbit   ------------------------------------------------------------

human    TCTACTCCTTCCACTCATCTATTTACTAGTGGAGAAGAAACAGAGGAAACTTCGAATCCA
rabbit   ------------------------------------------------------------

human    TCTGTGTCTCAACCTGAGACTTCTGTTTCCAGAGTAAGGACCACCTTGGCCAGCACCTCT
rabbit   ------------------------------------------------------------

human    GTCCCTACCCCAGTATTCCCCACCATGGACACCTGGCCTACACGTTCAGCTCAGTTCTCT
rabbit   ------------------------------------------------------------

human    TCATCCCACCTAGTGAGTGAGCTCAGAGCTACGAGCAGTACCTCAGTTACAAACTCAACT
rabbit   ------------------------------------------------------------

human    GGTTCAGCTCTTCCTAAAATATCTCACCTCACTGGGACGGCAACAATGTCACAGACCAAT
rabbit   ------------------------------------------------------------

human    AGAGACACGTTTAATGACTCTGCTGCACCCCAAAGCACAACTTGGCCAGAGACTAGTCCC
rabbit   ------------------------------------------------------------

human    AGATTCAAGACAGGGTTACCTTCAGCAACAACCACTGTTTCAACCTCTGCCACTTCTCTC
rabbit   ------------------------------------------------------------
```

```
human    TCTGCTACTGTAATGGTCTCTAAATTCACTTCTCCAGCAACTAGTTCCATGGAAGCAACT
rabbit   ------------------------------------------------------------

human    TCTATCAGGGAACCATCAACAACCATCCTCACAACAGAGACCACGAATGGCCCAGGCTCT
rabbit   ------------------------------------------------------------

human    ATGGCTGTGGCTTCTACCAACATCCCAATTGGAAAGGGCTACATTACTGAAGGAAGATTG
rabbit   ------------------------------------------------------------

human    GACACAAGCCATCTGCCCATTGGAACCACAGCTTCCTCTGAGACATCTATGGATTTTACC
rabbit   ------------------------------------------------------------

human    ATGGCCAAAGAAAGTGTCTCAATGTCAGTATCTCCATCTCAGTCCATGGATGCTGCTGGC
rabbit   ------------------------------------------------------------

human    TCAAGCACTCCAGGAAGGACAAGCCAATTCGTTGACACATTTTCTGATGATGTCTATCAT
rabbit   ------------------------------------------------------------

human    TTAACATCCAGAGAAATTACAATACCTAGAGATGGAACAAGCTCAGCTCTGACTCCACAA
rabbit   ------------------------------------------------------------

human    ATGACTGCAACTCACCCTCCATCTCCTGATCCTGGCTCTGCTAGAAGCACCTGGCTTGGC
rabbit   ------------------------------------------------------------

human    ATCTTGTCCTCATCTCCTTCTTCTCCTACTCCCAAAGTCACAATGAGCTCCACATTTTCA
rabbit   ------------------------------------------------------------
```

```
human    ACTCAGAGAGTCACCACAAGCATGATAATGGACACAGTTGAAACTAGTCGGTGGAACATG
rabbit   ------------------------------------------------------------

human    CCCAACTTACCTTCCACGACTTCCTTGACACCAAGTAATATTCCAACAAGTGGTGCCATA
rabbit   ------------------------------------------------------------

human    GGAAAAAGCACCCTGGTTCCCTTGGACACTCCATCTCCAGCCACATCATTGGAGGCATCA
rabbit   ------------------------------------------------------------

human    GAAGGGGGACTTCCAACCCTCAGCACCTACCCTGAATCAACAAACACACCCAGCATCCAC
rabbit   ------------------------------------------------------------

human    CTCGGAGCACACGCTAGTTCAGAAAGTCCAAGCACCATCAAACTTACCATGGCTTCAGTA
rabbit   ------------------------------------------------------------

human    GTAAAACCTGGCTCTTACACACCTCTCACCTTCCCCTCAATAGAGACCCACATTCATGTA
rabbit   ------------------------------------------------------------

human    TCAACAGCCAGAATGGCTTACTCTTCTGGGTCTTCACCTGAGATGACAGCTCCTGGAGAG
rabbit   ------------------------------------------------------------

human    ACTAACACTGGTAGTACCTGGGACCCCACCACCTACATCACCACTACGGATCCTAAGGAT
rabbit   ------------------------------------------------------------

human    ACAAGTTCAGCTCAGGTCTCTACACCCCACTCAGTGAGGACACTCAGAACCACAGAAAAC
rabbit   ------------------------------------------------------------
```

```
human    CATCCAAAGACAGAGTCCGCCACCCCAGCTGCTTACTCTGGAAGTCCTAAAATCTCAAGT
rabbit   ------------------------------------------------------------

human    TCACCCAATCTCACCAGTCCGGCCACAAAAGCATGGACCATCACAGACACAACTGAACAC
rabbit   ------------------------------------------------------------

human    TCCACTCAATTACATTACACAAAATTGGCAGAAAAATCATCTGGATTTGAGACACAGTCA
rabbit   ------------------------------------------------------------

human    GCTCCAGGACCTGTCTCTGTAGTAATCCCTACCTCCCCTACCATTGGAAGCAGCACATTG
rabbit   ------------------------------------------------------------

human    GAACTAACTTCTGATGTCCCAGGGGAACCCCTGGTCCTTGCTCCCAGTGAGCAGACCACA
rabbit   ------------------------------------------------------------

human    ATCACTCTCCCCATGGCAACATGGCTGAGTACCAGTTTGACAGAGGAAATGGCTTCAACA
rabbit   ------------------------------------------------------------

human    GACCTTGATATTTCAAGTCCAAGTTCACCCATGAGTACATTTGCTATTTTTCCACCTATG
rabbit   ------------------------------------------------------------

human    TCCACACCTTCTCATGAACTTTCAAAGTCAGAGGCAGATACCAGTGCCATTAGAAATACA
rabbit   ------------------------------------------------------------

human    GATTCAACAACGTTGGATCAGCACCTAGGAATCAGGAGTTTGGGCAGAACTGGGGACTTA
rabbit   ------------------------------------------------------------
```

```
human           ACAACTGTTCCTATCACCCCACTGACAACCACGTGGACCAGTGTGATTGAACACTCAACA
rabbit          ------------------------------------------------------------

human           CAAGCACAGGACACCCTTTCTGCAACGATGAGTCCTACTCACGTGACACAGTCACTCAAA
rabbit          ------------------------------------------------------------

human           GATCAAACATCTATACCAGCCTCAGCATCCCCTTCCCATCTTACTGAAGTCTACCCTGAG
rabbit          ------------------------------------------------------------

human           CTCGGGACACAAGGGAGAAGCTCCTCTGAGGCAACCACTTTTTGGAAACCATCTACAGAC
rabbit          ------------------------------------------------------------

human           ACACTGTCCAGAGAGATTGAGACTGGCCCAACAAACATTCAATCCACTCCACCCATGGAC
rabbit          ------------------------------------------------------------

human           AACACAACAACAGGGAGCAGTAGTAGTGGAGTCACCCTGGGCATAGCCCACCTTCCCATA
rabbit          ------------------------------------------------------------

human           GGAACATCCTCCCCAGCTGAGACATCCACAAACATGGCACTGGAAAGAAGAAGTTCTACA
rabbit          ------------------------------------------------------------

human           GCCACTGTCTCTATGGCTGGGACAATGGGACTCCTTGTTACTAGTGCTCCAGGAAGAAGC
rabbit          ------------------------------------------------------------

human           ATCAGCCAGTCATTAGGAAGAGTTTCCTCTGTCCTTTCTGAGTCAACTACTGAAGGAGTC
rabbit          ------------------------------------------------------------
```

```
human           ACAGATTCTAGTAAGGGAAGCAGCCCAAGGCTGAACACACAGGGAAATACAGCTCTCTCC
rabbit          ------------------------------------------------------------

human           TCCTCTCTTGAACCCAGCTATGCTGAAGGAAGCCAGATGAGCACAAGCATCCCTCTAACC
rabbit          ------------------------------------------------------------

human           TCATCTCCTACAACTCCTGATGTGGAATTCATAGGGGGCAGCACATTTTGGACCAAGGAG
rabbit          ------------------------------------------------------------

human           GTCACCACAGTTATGACCTCAGACATCTCCAAGTCTTCAGCAAGGACAGAGTCCAGCTCA
rabbit          ------------------------------------------------------------

human           GCTACCCTTATGTCCACAGCTTTGGGAAGCACTGAAAATACAGGAAAAGAAAAACTCAGA
rabbit          ------------------------------------------------------------

human           ACTGCCTCTATGGATCTTCCATCTCCAACTCCATCAATGGAGGTGACACCATGGATTTCT
rabbit          ------------------------------------------------------------

human           CTCACTCTCAGTAATGCCCCCAATACCACAGATTCACTTGACCTCAGCCATGGGGTGCAC
rabbit          ------------------------------------------------------------

human           ACCAGCTCTGCAGGGACTTTGGCCACTGACAGGTCATTGAATACTGGTGTCACTAGAGCC
rabbit          ------------------------------------------------------------

human           TCCAGATTGGAAAACGGCTCTGATACCTCTTCTAAGTCCCTGTCTATGGGAAACAGCACT
rabbit          ------------------------------------------------------------
```

```
human           CACACTTCCATGACTTACACAGAGAAGAGTGAAGTGTCTTCTTCAATCCATCCCCGACCT
rabbit          ------------------------------------------------------------

human           GAGACCTCAGCTCCTGGAGCAGAGACCACTTTGACTTCCACTCCTGGAAACAGGGCCATA
rabbit          ------------------------------------------------------------

human           AGCTTAACATTGCCTTTTTCATCCATTCCAGTGGAAGAAGTCATTTCTACAGGCATAACC
rabbit          ------------------------------------------------------------

human           TCAGGACCAGACATCAACTCAGCACCCATGACACATTCTCCCATCACCCCACCAACAATT
rabbit          ------------------------------------------------------------

human           GTATGGACCAGTACAGGCACAATTGAACAGTCCACTCAACCACTACATGCAGTTTCTTCA
rabbit          ------------------------------------------------------------

human           GAAAAAGTTTCTGTGCAGACACAGTCAACTCCATATGTCAACTCTGTGGCAGTGTCTGCT
rabbit          ------------------------------------------------------------

human           TCCCCTACCCATGAGAATTCAGTCTCTTCTGGAAGCAGCACATCCTCTCCATATTCCTCA
rabbit          ------------------------------------------------------------

human           GCCTCACTTGAATCCTTGGATTCCACAATCAGTAGGAGGAATGCAATCACTTCCTGGCTA
rabbit          ------------------------------------------------------------

human           TGGGACCTCACTACATCTCTCCCCACTACAACTTGGCCAAGTACTAGTTTATCTGAGGCA
rabbit          ------------------------------------------------------------
```

```
human           CTGTCCTCAGGCCATTCTGGGGTTTCAAACCCAAGTTCAACTACGACTGAATTTCCACTC
rabbit          ------------------------------------------------------------

human           TTTTCAGCTGCATCCACATCTGCTGCTAAGCAAAGAAATCCAGAAACAGAGACCCATGGT
rabbit          ------------------------------------------------------------

human           CCCCAGAATACAGCCGCGAGTACTTTGAACACTGATGCATCCTCGGTCACAGGTCTTTCT
rabbit          ------------------------------------------------------------

human           GAGACTCCTGTGGGGGCAAGTATCAGCTCTGAAGTCCCTCTTCCAATGGCCATAACTTCT
rabbit          ------------------------------------------------------------

human           AGATCAGATGTTTCTGGCCTTACATCTGAGAGTACTGCTAACCCGAGTTTAGGCACAGCC
rabbit          ------------------------------------------------------------

human           TCTTCAGCAGGGACCAAATTAACTAGGACAATATCCCTGCCCACTTCAGAGTCTTTGGTT
rabbit          ------------------------------------------------------------

human           TCCTTTAGAATGAACAAGGATCCATGGACAGTGTCAATCCCTTTGGGGTCCCATCCAACT
rabbit          ------------------------------------------------------------

human           ACTAATACAGAAACAAGCATCCCAGTAAACAGCGCAGGTCCACCTGGCTTGTCCACAGTA
rabbit          ------------------------------------------------------------

human           GCATCAGATGTAATTGACACACCTTCAGATGGGGCTGAGAGTATTCCCACTGTCTCCTTT
rabbit          ------------------------------------------------------------
```

```
human    TCCCCCTCCCCTGATACTGAAGTGACAACTATCTCACATTTCCCAGAAAAGACAACTCAT
rabbit   ------------------------------------------------------------

human    TCATTTAGAACCATTTCATCTCTCACTCATGAGTTGACTTCAAGAGTGACACCTATTCCT
rabbit   ------------------------------------------------------------

human    GGGGATTGGATGAGTTCAGCTATGTCTACAAAGCCCACAGGAGCCAGTCCCTCCATTACA
rabbit   ------------------------------------------------------------

human    CTGGGAGAGAGAAGGACAATCACCTCTGCTGCTCCAACCACTTCCCCCATAGTTCTCACT
rabbit   ------------------------------------------------------------

human    GCTAGTTTCACAGAGACCAGCACAGTTTCACTGGATAATGAAACTACAGTAAAAACCTCA
rabbit   ------------------------------------------------------------

human    GATATCCTTGACGCACGGAAAACAAATGAGCTCCCCTCAGATAGCAGTTCTTCTTCTGAT
rabbit   ------------------------------------------------------------

human    CTGATCAACACCTCCATAGCTTCTTCAACTATGGATGTCACTAAAACAGCCTCCATCAGT
rabbit   ------------------------------------------------------------

human    CCCACTAGCATCTCAGGAATGACAGCAAGTTCCTCCCCATCTCTCTTCTCTTCAGATAGA
rabbit   ------------------------------------------------------------

human    CCCCAGGTTCCCACATCTACAACAGAGACAAATACAGCCACCTCTCCATCTGTTTCCAGT
rabbit   ------------------------------------------------------------
```

```
human          AACACCTATTCTCTTGATGGGGGCTCCAATGTGGGTGGCACTCCATCCACTTTACCACCC
rabbit         ------------------------------------------------------------

human          TTTACAATCACCCACCCTGTCGAGACAAGCTCGGCCCTATTAGCCTGGTCTAGACCAGTA
rabbit         ------------------------------------------------------------

human          AGAACTTTCAGCACCATGGTCAGCACTGACACTGCCTCCGGAGAAAATCCTACCTCTAGC
rabbit         ------------------------------------------------------------

human          AATTCTGTGGTGACTTCTGTTCCAGCACCAGGTACATGGACCAGTGTAGGCAGTACTACT
rabbit         ------------------------------------------------------------

human          GACTTACCTGCCATGGGCTTTCTCAAGACAAGTCCTGCAGGAGAGGCACACTCACTTCTA
rabbit         ------------------------------------------------------------

human          GCATCAACTATTGAACCAGCCACTGCCTTCACTCCCCATCTCTCAGCAGCAGTGGTCACT
rabbit         ------------------------------------------------------------

human          GGATCCAGTGCTACATCAGAAGCCAGTCTTCTCACTACGAGTGAAAGCAAAGCCATTCAT
rabbit         ------------------------------------------------------------

human          TCTTCACCACAGACCCCAACTACACCCACCTCTGGAGCAAACTGGGAAACTTCAGCTACT
rabbit         ------------------------------------------------------------

human          CCTGAGAGCCTTTTGGTAGTCACTGAGACTTCAGACACAACACTTACCTCAAAGATTTTG
rabbit         ------------------------------------------------------------
```

```
human    GTCACAGATACCATCTTGTTTTCAACTGTGTCCACGCCACCTTCTAAATTTCCAAGTACG
rabbit   ------------------------------------------------------------

human    GGGACTCTGTCTGGAGCTTCCTTCCCTACTTTACTCCCGGACACTCCAGCCATCCCTCTC
rabbit   ------------------------------------------------------------

human    ACTGCCACTGAGCCAACAAGTTCATTAGCTACATCCTTTGATTCCACCCCACTGGTGACT
rabbit   ------------------------------------------------------------

human    ATAGCTTCGGATAGTCTTGGCACAGTCCCAGAGACTACCCTGACCATGTCAGAGACCTCA
rabbit   ------------------------------------------------------------

human    AATGGTGATGCACTGGTTCTTAAGACAGTAAGTAACCCAGATAGGAGCATCCCTGGAATC
rabbit   ------------------------------------------------------------

human    ACTATCCAAGGAGTAACAGAAAGTCCACTCCATCCTTCTTCCACTTCCCCCTCTAAGATT
rabbit   ------------------------------------------------------------

human    GTTGCTCCACGGAATACAACCTATGAAGGTTCGATCACAGTGGCACTTTCTACTTTGCCT
rabbit   ------------------------------------------------------------

human    GCGGGAACTACTGGTTCCCTTGTATTCAGTCAGAGTTCTGAAAACTCAGAGACAACGGCT
rabbit   ------------------------------------------------------------

human    TTGGTAGACTCATCAGCTGGGCTTGAGAGGGCATCTGTGATGCCACTAACCACAGGAAGC
rabbit   ------------------------------------------------------------
```

```
human    CAGGGTATGGCTAGCTCTGGAGGAATCAGAAGTGGGTCCACTCACTCAACTGGAACCAAA
rabbit   ------------------------------------------------------------

human    ACATTTTCTTCTCTCCCTCTGACCATGAACCCAGGTGAGGTTACAGCCATGTCTGAAATC
rabbit   ------------------------------------------------------------

human    ACCACGAACAGACTGACAGCTACTCAATCAACAGCACCCAAAGGGATACCTGTGAAGCCC
rabbit   ------------------------------------------------------------

human    ACCAGTGCTGAGTCAGGCCTCCTAACACCTGTCTCTGCCTCCTCAAGCCCATCAAAGGCC
rabbit   ------------------------------------------------------------

human    TTTGCCTCACTGACTACAGCTCCCCCAACTTGGGGGATCCCACAGTCTACCTTGACATTT
rabbit   ------------------------------------------------------------

human    GAGTTTTCTGAGGTCCCAAGTTTGGATACTAAGTCCGCTTCTTTACCAACTCCTGGACAG
rabbit   ------------------------------------------------------------

human    TCCCTGAACACCATTCCAGACTCAGATGCAAGCACAGCATCTTCCTCACTGTCCAAGTCT
rabbit   ------------------------------------------------------------

human    CCAGAAAAAAAACCCAAGGGCAAGGATGATGACTTCCACAAAGGCCATAAGTGCAAGCTCA
rabbit   ------------------------------------------------------------

human    TTTCAATCAACAGGTTTTACTGAAACCCCTGAGGGATCTGCCTCCCCTTCTATGGCAGGG
rabbit   ------------------------------------------------------------
```

```
human    CATGAACCCAGAGTCCCCACTTCAGGAACAGGGGACCCTAGATATGCCTCAGAGAGCATG
rabbit   ------------------------------------------------------------

human    TCTTATCCAGACCCAAGCAAGGCATCATCAGCTATGACATCGACCTCTCTTGCATCAAAA
rabbit   ------------------------------------------------------------

human    CTCACAACTCTCTTCAGCACAGGTCAAGCAGCAAGGTCTGGTTCTAGTTCCTCTCCCATA
rabbit   ------------------------------------------------------------

human    AGCCTATCCACTGAGAAAGAAACAAGCTTCCTTTCCCCCACTGCATCCACCTCCAGAAAG
rabbit   ------------------------------------------------------------

human    ACTTCACTATTTCTTGGGCCTTCCATGGCAAGGCAGCCCAACATATTGGTGCATCTTCAG
rabbit   ------------------------------------------------------------

human    ACTTCAGCTCTGACACTTTCTCCAACATCCACTCTAAATATGTCCCAGGAGGAGCCTCCT
rabbit   ------------------------------------------------------------

human    GAGTTAACCTCAAGCCAGACCATTGCAGAAGAAGAGGGAACAACAGCTGAAACACAGACG
rabbit   ------------------------------------------------------------

human    TTAACCTTCACACCATCTGAGACCCCAACATCCTTGTTACCTGTCTCTTCTCCCACAGAA
rabbit   ------------------------------------------------------------

human    CCCACAGCCAGAAGAAAGAGTTCTCCAGAAACATGGGCAAGCTCTATTTCAGTTCCTGCC
rabbit   ------------------------------------------------------------
```

```
human    AAGACCTCCTTGGTTGAAACAACTGATGGAACGCTAGTGACCACCATAAAGATGTCAAGC
rabbit   ------------------------------------------------------------

human    CAGGCAGCACAAGGAAATTCCACGTGGCCTGCCCCAGCAGAGGAGACGGGGAGCAGTCCA
rabbit   ------------------------------------------------------------

human    GCAGGCACATCCCCAGGAAGCCCAGAAATGTCTACCACTCTCAAAATCATGAGCTCCAAG
rabbit   ------------------------------------------------------------

human    GAACCCAGCATCAGCCCAGAGATCAGGTCCACTGTGAGAAATTCTCCTTGGAAGACTCCA
rabbit   ------------------------------------------------------------

human    GAAACAACTGTTCCCATGGAGACCACAGTGGAACCAGTCACCCTTCAGTCCACAGCCCTA
rabbit   ------------------------------------------------------------

human    GGAAGTGGCAGCACCAGCATCTCTCACCTGCCCACAGGAACCACATCACCAACCAAGTCA
rabbit   ------------------------------------------------------------

human    CCAACAGAAAATATGTTGGCTACAGAAAGGGTCTCCCTCTCCCCATCCCCACCTGAGGCT
rabbit   ------------------------------------------------------------

human    TGGACCAACCTTTATTCTGGAACTCCAGGAGGGACCAGGCAGTCACTGGCCACAATGTCC
rabbit   ------------------------------------------------------------

human    TCTGTCTCCCTAGAGTCACCAACTGCTAGAAGCATCACAGGGACTGGTCAGCAAAGCAGT
rabbit   ------------------------------------------------------------
```

```
human    CCAGAACTGGTTTCAAAGACAACTGGAATGGAATTCTCTATGTGGCATGGCTCTACTGGA
rabbit   ------------------------------------------------------------

human    GGGACCACAGGGGACACACATGTCTCTCTGAGCACATCTTCCAATATCCTTGAAGACCCT
rabbit   ------------------------------------------------------------

human    GTAACCAGCCCAAACTCTGTGAGCTCATTGACAGATAAATCCAAACATAAAACCGAGACA
rabbit   ------------------------------------------------------------

human    TGGGTAAGCACCACAGCCATTCCCTCCACTGTCCTGAATAATAAGATAATGGCAGCTGAA
rabbit   ------------------------------------------------------------

human    CAACAGACAAGTCGATCTGTGGATGAGGCTTATTCATCAACTAGTTCTTGGTCAGATCAG
rabbit   ------------------------------------------------------------

human    ACATCTGGGAGTGACATCACCCTTGGTGCATCTCCTGATGTCACAAACACATTATACATC
rabbit   ------------------------------------------------------------

human    ACCTCCACAGCACAAACCACCTCACTAGTGTCTCTGCCCTCTGGAGACCAAGGCATTACA
rabbit   ------------------------------------------------------------

human    AGCCTCACCAATCCCTCAGGAGGAAAAACAAGCTCTGCGTCATCTGTCACATCTCCTTCA
rabbit   ------------------------------------------------------------

human    ATAGGGCTTGAGACTCTGAGGGCCAATGTAAGTGCAGTGAAAAGTGACATTGCCCCTACT
rabbit   ------------------------------------------------------------
```

```
human          GCTGGGCATCTATCTCAGACTTCATCTCCTGCGGAAGTGAGCATCCTGGACGTAACCACA
rabbit         ------------------------------------------------------------

human          GCTCCTACTCCAGGTATCTCCACCACCATCACCACCATGGGAACCAACTCAATCTCAACT
rabbit         ------------------------------------------------------------

human          ACCACACCCAACCCAGAAGTGGGTATGAGTACCATGGACAGCACCCCGGCCACAGAGAGG
rabbit         ------------------------------------------------------------

human          CGCACAACTTCTACAGAACACCCTTCCACCTGGTCTTCCACAGCTGCATCAGATTCCTGG
rabbit         ------------------------------------------------------------

human          ACTGTCACAGACATGACTTCAAACTTGAAAGTTGCAAGATCTCCTGGAACAATTTCCACA
rabbit         ------------------------------------------------------------

human          ATGCATACAACTTCATTCTTAGCCTCAAGCACTGAATTAGACTCCATGTCTACTCCCCAT
rabbit         ------------------------------------------------------------

human          GGCCGTATAACTGTCATTGGAACCAGCCTGGTCACTCCATCCTCTGATGCTTCAGCTGTA
rabbit         ------------------------------------------------------------

human          AAGACAGAGACCAGTACAAGTGAAAGAACATTGAGTCCTTCAGACACAACTGCATCTACT
rabbit         ------------------------------------------------------------

human          CCCATCTCAACTTTTTCTCGTGTCCAGAGGATGAGCATCTCAGTTCCTGACATTTTAAGT
rabbit         ------------------------------------------------------------
```

```
human           ACAAGTTGGACTCCCAGTAGTACAGAAGCAGAAGATGTGCCTGTTTCAATGGTTTCTACA
rabbit          ------------------------------------------------------------

human           GATCATGCTAGTACAAAGACTGACCCAAATACGCCCCTGTCCACTTTTCTGTTTGATTCT
rabbit          ------------------------------------------------------------

human           CTGTCCACTCTTGACTGGGACACTGGGAGATCTCTGTCATCAGCCACAGCCACTACCTCA
rabbit          ------------------------------------------------------------

human           GCTCCTCAGGGGGCCACAACTCCCCAGGAACTCACTTTGGAAACCATGATCAGCCCAGCT
rabbit          ------------------------------------------------------------

human           ACCTCACAGTTGCCCTTCTCTATAGGGCACATTACAAGTGCAGTCACACCAGCTGCAATG
rabbit          ------------------------------------------------------------

human           GCAAGGAGCTCTGGAGTTACTTTTTCAAGACCAGATCCCACAAGCAAAAAGGCAGAGCAG
rabbit          ------------------------------------------------------------

human           ACTTCCACTCAGCTTCCCACCACCACTTCTGCACATCCAGGGCAGGTGCCCAGATCAGCA
rabbit          ------------------------------------------------------------

human           GCAACAACTCTGGATGTGATCCCACACACAGCAAAAACTCCAGATGCAACTTTTCAGAGA
rabbit          ------------------------------------------------------------

human           CAAGGGCAGACAGCTCTTACAACAGAGGCAAGAGCTACATCTGACTCCTGGAATGAGAAA
rabbit          ------------------------------------------------------------
```

```
human    GAAAAATCAACCCCAAGTGCACCTTGGATCACTGAGATGATGAATTCTGTCTCAGAAGAT
rabbit   ------------------------------------------------------------

human    ACCATCAAGGAGGTTACCAGCTCCTCCAGTGTATTAAGGACCCTGAATACGCTGGACATA
rabbit   ------------------------------------------------------------

human    AACTTGGAATCTGGGACGACTTCATCCCCAAGTTGGAAAAGCAGCCCATATGAGAGAATT
rabbit   ------------------------------------------------------------

human    GCCCCTTCTGAGTCCACCACAGACAAAGAGGCAATTCACCCTTCTACAAACACAGTAGAG
rabbit   ------------------------------------------------------------

human    ACCACAGGCTGGGTCACAAGTTCCGAACATGCTTCTCATTCCACTATCCCAGCCCACTCA
rabbit   ------------------------------------------------------------

human    GCGTCATCCAAACTCACATCTCCAGTGGTTACAACCTCCACCAGGGAACAAGCAATAGTT
rabbit   ------------------------------------------------------------

human    TCTATGTCAACAACCACATGGCCAGAGTCTACAAGGGCTAGAACAGAGCCTAATTCCTTC
rabbit   ------------------------------------------------------------

human    TTGACTATTGAACTGAGGGACGTCAGCCCTTACATGGACACCAGCTCAACCACACAAACA
rabbit   ------------------------------------------------------------

human    AGTATTATCTCTTCCCCAGGTTCCACTGCGATCACCAAGGGGCCTAGAACAGAAATTACC
rabbit   ------------------------------------------------------------
```

```
human    TCCTCTAAGAGAATATCCAGCTCATTCCTTGCCCAGTCTATGAGGTCGTCAGACAGCCCC
rabbit   ------------------------------------------------------------

human    TCAGAAGCCATCACCAGGCTGTCTAACTTTCCTGCCATGACAGAATCTGGAGGAATGATC
rabbit   ------------------------------------------------------------

human    CTTGCTATGCAAACAAGTCCACCTGGCGCTACATCACTAAGTGCACCTACTTTGGATACA
rabbit   ------------------------------------------------------------

human    TCAGCCACAGCCTCCTGGACAGGGACTCCACTGGCTACGACTCAGAGATTTACATACTCA
rabbit   ------------------------------------------------------------

human    GAGAAGACCACTCTCTTTAGCAAAGGTCCTGAGGATACATCACAGCCAAGCCCTCCCTCT
rabbit   ------------------------------------------------------------

human    GTGGAAGAAACCAGCTCTTCCTCTTCCCTGGTACCTATCCATGCTACAACCTCGCCTTCC
rabbit   ------------------------------------------------------------

human    AATATTTTGTTGACATCACAAGGGCACAGTCCCTCCTCTACTCCACCTGTGACCTCAGTT
rabbit   ------------------------------------------------------------

human    TTCTTGTCTGAGACCTCTGGCCTGGGGAAGACCACAGACATGTCGAGGATAAGCTTGGAA
rabbit   ------------------------------------------------------------

human    CCTGGCACAAGTTTACCTCCCAATTTGAGCAGTACAGCAGGTGAGGCGTTATCCACTTAT
rabbit   ------------------------------------------------------------
```

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human           GAAGCCTCCAGAGATACAAAGGCAATTCATCATTCTGCAGACACAGCAGTGACGAATATG
rabbit          ------------------------------------------------------------

human           GAGGCAACCAGTTCTGAATATTCTCCTATCCCAGGCCATACAAAGCCATCCAAAGCCACA
rabbit          ------------------------------------------------------------

human           TCTCCATTGGTTACCTCCCACATCATGGGGGACATCACTTCTTCCACATCAGTATTTGGC
rabbit          ------------------------------------------------------------

human           TCCTCCGAGACCACAGAGATTGAGACAGTGTCCTCTGTGAACCAGGGACTTCAGGAGAGA
rabbit          ------------------------------------------------------------

human           AGCACATCCCAGGTGGCCAGCTCTGCTACAGAGACAAGCACTGTCATTACCCATGTGTCT
rabbit          ------------------------------------------------------------

human           AGTGGTGATGCTACTACTCATGTCACCAAGACACAAGCCACTTTCTCTAGCGGAACATCC
rabbit          ------------------------------------------------------------

human           ATCTCAAGCCCTCATCAGTTTATAACTTCTACCAACACATTTACAGATGTGAGCACCAAC
rabbit          ------------------------------------------------------------

human           CCCTCCACCTCTCTGATAATGACAGAATCTTCAGGAGTGACCATCACCACCCAAACAGGT
rabbit          ------------------------------------------------------------

human           CCTACTGGAGCTGCAACACAGGGTCCATATCTCTTGGACACATCAACCATGCCTTACTTG
rabbit          ------------------------------------------------------------
```

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human           ACAGAGACTCCATTAGCTGTGACTCCAGATTTTATGCAATCAGAGAAGACCACTCTCATA
rabbit          ------------------------------------------------------------

human           AGCAAAGGTCCCAAGGATGTGTCCTGGACAAGCCCTCCCTCTGTGGCAGAAACCAGCTAT
rabbit          ------------------------------------------------------------

human           CCCTCTTCCCTGACACCTTTCTTGGTCACAACCATACCTCCTGCCACTTCCACGTTACAA
rabbit          ------------------------------------------------------------

human           GGGCAACATACATCCTCTCCTGTTTCTGCGACTTCAGTTCTTACCTCTGGACTGGTGAAG
rabbit          ------------------------------------------------------------

human           ACCACAGATATGTTGAACACAAGCATGGAACCTGTGACCAATTCACCTCAAAATTTGAAC
rabbit          ------------------------------------------------------------

human           AATCCATCAAATGAGATACTGGCCACTTTGGCAGCCACCACAGATATAGAGACTATTCAT
rabbit          ------------------------------------------------------------

human           CCTTCCATAAACAAAGCAGTGACCAATATGGGGACTGCCAGTTCAGCACATGTACTGCAT
rabbit          ------------------------------------------------------------

human           TCCACTCTCCCAGTCAGCTCAGAACCATCTACAGCCACATCTCCAATGGTTCCTGCCTCC
rabbit          ------------------------------------------------------------

human           AGCATGGGGGACGCTCTTGCTTCTATATCAATACCTGGTTCTGAGACCACAGACATTGAG
rabbit          ------------------------------------------------------------
```

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human    GGAGAGCCAACATCCTCCCTGACTGCTGGACGAAAAGAGAACAGCACCCTCCAGGAGATG
rabbit   ------------------------------------------------------------

human    AACTCAACTACAGAGTCAAACATCATCCTCTCCAATGTGTCTGTGGGGGCTATTACTGAA
rabbit   ------------------------------------------------------------

human    GCCACAAAAATGGAAGTCCCCTCTTTTGATGCAACATTCATACCAACTCCTGCTCAGTCA
rabbit   ------------------------------------------------------------

human    ACAAAGTTCCCAGATATTTTCTCAGTAGCCAGCAGTAGACTTTCAAACTCTCCTCCCATG
rabbit   ------------------------------------------------------------

human    ACAATATCTACCCACATGACCACCACCCAGACAGGGTCTTCTGGAGCTACATCAAAGATT
rabbit   ------------------------------------------------------------

human    CCACTTGCCTTAGACACATCAACCTTGGAAACCTCAGCAGGGACTCCATCAGTGGTGACT
rabbit   ------------------------------------------------------------

human    GAGGGGTTTGCCCACTCAAAAATAACCACTGCAATGAACAATGATGTCAAGGACGTGTCA
rabbit   ------------------------------------------------------------

human    CAGACAAACCCTCCCTTTCAGGATGAAGCCAGCTCTCCCTCTTCTCAAGCACCTGTCCTT
rabbit   ------------------------------------------------------------

human    GTCACAACCTTACCTTCTTCTGTTGCTTTCACACCGCAATGGCACAGTACCTCCTCTCCT
rabbit   ------------------------------------------------------------
```

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human          GTTTCTATGTCCTCAGTTCTTACTTCTTCACTGGTAAAGACCGCAGGCAAGGTGGATACA
rabbit         ------------------------------------------------------------

human          AGCTTAGAAACAGTGACCAGTTCACCTCAAAGTATGAGCAACACTTTGGATGACATATCG
rabbit         ------------------------------------------------------------

human          GTCACTTCAGCAGCCACCACAGATATAGAGACAACGCATCCTTCCATAAACACAGTAGTT
rabbit         ------------------------------------------------------------

human          ACCAATGTGGGGACCACCGGTTCAGCATTTGAATCACATTCTACTGTCTCAGCTTACCCA
rabbit         ------------------------------------------------------------

human          GAGCCATCTAAAGTCACATCTCCAAATGTTACCACCTCCACCATGGAAGACACCACAATT
rabbit         ------------------------------------------------------------

human          TCCAGATCAATACCTAAATCCTCTAAGACTACAAGAACTGAGACTGAGACAACTTCCTCC
rabbit         ------------------------------------------------------------

human          CTGACTCCTAAACTGAGGGAGACCAGCATCTCCCAGGAGATCACCTCGTCCACAGAGACA
rabbit         ------------------------------------------------------------

human          AGCACTGTTCCTTACAAAGAGCTCACTGGTGCCACTACCGAGGTATCCAGGACAGATGTC
rabbit         ------------------------------------------------------------

human          ACTTCCTCTAGCAGTACATCCTTCCCTGGCCCTGATCAGTCCACAGTGTCACTAGACATC
rabbit         ------------------------------------------------------------
```

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human    TCCACAGAAACCAACACCAGGCTGTCTACCTCCCCAATAATGACAGAATCTGCAGAAATA
rabbit   ------------------------------------------------------------

human    ACCATCACCACCCAAACAGGTCCTCATGGGGCTACATCACAGGATACTTTTACCATGGAC
rabbit   ------------------------------------------------------------

human    CCATCAAATACAACCCCCCAGGCAGGGATCCACTCAGCTATGACTCATGGATTTTCACAA
rabbit   ------------------------------------------------------------

human    TTGGATGTGACCACTCTTATGAGCAGAATTCCACAGGATGTATCATGGACAAGTCCTCCC
rabbit   ------------------------------------------------------------

human    TCTGTGGATAAAACCAGCTCCCCCTCTTCCTTTCTGTCCTCACCTGCAATGACCACACCT
rabbit   ------------------------------------------------------------

human    TCCCTGATTTCTTCTACCTTACCAGAGGATAAGCTCTCCTCTCCTATGACTTCACTTCTC
rabbit   ------------------------------------------------------------

human    ACCTCTGGCCTAGTGAAGATTACAGACATATTACGTACACGCTTGGAACCTGTGACCAGC
rabbit   ------------------------------------------------------------

human    TCACTTCCAAATTTCAGCAGCACCTCAGATAAGATACTGGCCACTTCTAAAGACAGTAAA
rabbit   ------------------------------------------------------------

human    GACACAAAGGAAATTTTTCCTTCTATAAACACAGAAGAGACCAATGTGAAAGCCAACAAC
rabbit   ------------------------------------------------------------
```

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human    TCTGGACATGAATCCCATTCCCCTGCACTGGCTGACTCAGAGACACCCAAAGCCACAACT
rabbit   ------------------------------------------------------------

human    CAAATGGTTATCACCACCACTGTGGGAGATCCAGCTCCTTCCACATCAATGCCAGTGCAT
rabbit   ------------------------------------------------------------

human    GGTTCCTCTGAGACTACAAACATTAAGAGAGAGCCAACATATTTCTTGACTCCTAGACTG
rabbit   ------------------------------------------------------------

human    AGAGAGACCAGTACCTCTCAGGAGTCCAGCTTTCCCACGGACACAAGTTTTCTACTTTCC
rabbit   ------------------------------------------------------------

human    AAAGTCCCCACTGGTACTATTACTGAGGTCTCCAGTACAGGGGTCAACTCTTCTAGCAAA
rabbit   ------------------------------------------------------------

human    ATTTCCACCCCAGACCATGATAAGTCCACAGTGCCACCTGACACCTTCACAGGAGAGATC
rabbit   ------------------------------------------------------------

human    CCCAGGGTCTTCACCTCCTCTATTAAGACAAAATCTGCAGAAATGACGATCACCACCCAA
rabbit   ------------------------------------------------------------

human    GCAAGTCCTCCTGAGTCTGCATCGCACAGTACCCTTCCCTTGGACACATCAACCACACTT
rabbit   ------------------------------------------------------------

human    TCCCAGGGAGGGACTCATTCAACTGTGACTCAGGGATTCCCATACTCAGAGGTGACCACT
rabbit   ------------------------------------------------------------
```

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human          CTCATGGGCATGGGTCCTGGGAATGTGTCATGGATGACAACTCCCCCTGTGGAAGAAACC
rabbit         ------------------------------------------------------------

human          AGCTCTGTGTCTTCCCTGATGTCTTCACCTGCCATGACATCCCCTTCTCCTGTTTCCTCC
rabbit         ------------------------------------------------------------

human          ACATCACCACAGAGCATCCCCTCCTCTCCTCTTCCTGTGACTGCACTTCCTACTTCTGTT
rabbit         ------------------------------------------------------------

human          CTGGTGACAACCACAGATGTGTTGGGCACAACAAGCCCAGAGTCTGTAACCAGTTCACCT
rabbit         ------------------------------------------------------------

human          CCAAATTTGAGCAGCATCACTCATGAGAGACCGGCCACTTACAAAGACACTGCACACACA
rabbit         ------------------------------------------------------------

human          GAAGCCGCCATGCATCATTCCACAAACACCGCAGTGACCAATGTAGGGACTTCCGGGTCT
rabbit         ------------------------------------------------------------

human          GGACATAAATCACAATCCTCTGTCCTAGCTGACTCAGAGACATCGAAAGCCACACCTCTG
rabbit         ------------------------------------------------------------

human          ATGAGTACCACCTCCACCCTGGGGGACACAAGTGTTTCCACATCAACTCCTAATATCTCT
rabbit         ------------------------------------------------------------

human          CAGACTAACCAAATTCAAACAGAGCCAACAGCATCCCTGAGCCCTAGACTGAGGGAGAGC
rabbit         ------------------------------------------------------------
```

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human    AGCACGTCTGAGAAGACCAGCTCAACAACAGAGACAAATACTGCCTTTTCTTATGTGCCC
rabbit   ------------------------------------------------------------

human    ACAGGTGCTATTACTCAGGCCTCCAGAACAGAAATCTCCTCTAGCAGAACATCCATCTCA
rabbit   ------------------------------------------------------------

human    GACCTTGATCGGCCCACAATAGCACCCGACATCTCCACAGGAATGATCACCAGGCTCTTC
rabbit   ------------------------------------------------------------

human    ACCTCCCCCATCATGACAAAATCTGCAGAAATGACCGTCACCACTCAAACAACTACTCCT
rabbit   ------------------------------------------------------------

human    GGGGCTACATCACAGGGTATCCTTCCCTGGGACACATCAACCACACTTTTCCAGGGAGGG
rabbit   ------------------------------------------------------------

human    ACTCATTCAACCGTGTCTCAGGGATTCCCACACTCAGAGATAACCACTCTTCGGAGCAGA
rabbit   ------------------------------------------------------------

human    ACCCCTGGAGATGTGTCATGGATGACAACTCCCCCTGTGGAAGAAACCAGCTCTGGGTTT
rabbit   ------------------------------------------------------------

human    TCCCTGATGTCACCTTCCATGACATCCCCTTCTCCTGTTTCCTCCACATCACCAGAGAGC
rabbit   ------------------------------------------------------------

human    ATCCCCTCCTCTCCTCTCCCTGTGACTGCACTTCTTACTTCTGTTCTGGTGACAACCACA
rabbit   ------------------------------------------------------------
```

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human    AATGTATTGGGCACAACAAGCCCAGAGCCCGTAACGAGTTCACCTCCAAATTTAAGCAGC
rabbit   ------------------------------------------------------------

human    CCCACACAGGAGAGACTGACCACTTACAAAGACACTGCGCACACAGAAGCCATGCATGCT
rabbit   ------------------------------------------------------------

human    TCCATGCATACAAACACTGCAGTGGCCAACGTGGGGACCTCCATTTCTGGACATGAATCA
rabbit   ------------------------------------------------------------

human    CAATCTTCTGTCCCAGCTGATTCACACACATCCAAAGCCACATCTCCAATGGGTATCACC
rabbit   ------------------------------------------------------------

human    TTCGCCATGGGGGATACAAGTGTTTCTACATCAACTCCTGCCTTCTTTGAGACTAGAATT
rabbit   ------------------------------------------------------------

human    CAGACTGAATCAACATCCTCTTTGATTCCTGGATTAAGGGACACCAGGACGTCTGAGGAG
rabbit   ------------------------------------------------------------

human    ATCAACACTGTGACAGAGACCAGCACTGTCCTTTCAGAAGTGCCCACTACTACTACTACT
rabbit   ------------------------------------------------------------

human    GAGGTCTCCAGGACAGAAGTTATCACTTCCAGCAGAACAACCATCTCAGGGCCTGATCAT
rabbit   ------------------------------------------------------------

human    TCCAAAATGTCACCCTACATCTCCACAGAAACCATCACCAGGCTCTCCACTTTTCCTTTT
rabbit   ------------------------------------------------------------
```

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human    GTAACAGGATCCACAGAAATGGCCATCACCAACCAAACAGGTCCTATAGGGACTATCTCA
rabbit   ------------------------------------------------------------

human    CAGGCTACCCTTACCCTGGACACATCAAGCACAGCTTCCTGGGAAGGGACTCACTCACCT
rabbit   ------------------------------------------------------------

human    GTGACTCAGAGATTTCCACACTCAGAGGAGACCACTACTATGAGCAGAAGTACTAAGGGC
rabbit   ------------------------------------------------------------

human    GTGTCATGGCAAAGCCCTCCCTCTGTGGAAGAAACCAGTTCTCCTTCTTCCCCAGTGCCT
rabbit   ------------------------------------------------------------

human    TTACCTGCAATAACCTCACATTCATCTCTTTATTCCGCAGTATCAGGAAGTAGCCCCACT
rabbit   ------------------------------------------------------------

human    TCTGCTCTCCCTGTGACTTCCCTTCTCACCTCTGGCAGGAGGAAGACCATAGACATGTTG
rabbit   ------------------------------------------------------------

human    GACACACACTCAGAACTTGTGACCAGCTCCTTACCAAGTGCAAGTAGCTTCTCAGGTGAG
rabbit   ------------------------------------------------------------

human    ATACTCACTTCTGAAGCCTCCACAAATACAGAGACAATTCACTTTTCAGAGAACACAGCA
rabbit   ------------------------------------------------------------

human    GAAACCAATATGGGGACCACCAATTCTATGCATAAACTACATTCCTCTGTCTCAATCCAC
rabbit   ------------------------------------------------------------
```

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human    TCCCAGCCATCCGGACACACACCTCCAAAGGTTACTGGATCTATGATGGAGGACGCTATT
rabbit   ------------------------------------------------------------

human    GTTTCCACATCAACACCTGGTTCTCCTGAGACTAAAAATGTTGACAGAGACTCAACATCC
rabbit   ------------------------------------------------------------

human    CCTCTGACTCCTGAACTGAAAGAGGACAGCACCGCCCTGGTGATGAACTCAACTACAGAG
rabbit   ------------------------------------------------------------

human    TCAAACACTGTTTTCTCCAGTGTGTCCCTGGATGCTGCTACTGAGGTCTCCAGGGCAGAA
rabbit   ------------------------------------------------------------

human    GTCACCTACTATGATCCTACATTCATGCCAGCTTCTGCTCAGTCAACAAAGTCCCCAGAC
rabbit   ------------------------------------------------------------

human    ATTTCACCTGAAGCCAGCAGCAGTCATTCTAACTCTCCTCCCTTGACAATATCTACACAC
rabbit   ------------------------------------------------------------

human    AAGACCATCGCCACACAAACAGGTCCTTCTGGGGTGACATCTCTTGGCCAACTGACCCTG
rabbit   ------------------------------------------------------------

human    GACACATCAACCATAGCCACCTCAGCAGGAACTCCATCAGCCAGAACTCAGGATTTTGTA
rabbit   ------------------------------------------------------------

human    GATTCAGAAACAACCAGTGTCATGAACAATGATCTCAATGATGTGTTGAAGACAAGCCCT
rabbit   ------------------------------------------------------------
```

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human    TTCTCTGCAGAAGAAGCCAACTCTCTCTCTTCTCAGGCACCTCTCCTTGTGACAACCTCA
rabbit   ------------------------------------------------------------

human    CCTTCTCCTGTAACTTCCACATTGCAAGAGCACAGTACCTCCTCTCTTGTTTCTGTGACC
rabbit   ------------------------------------------------------------

human    TCAGTACCCACCCCTACACTGGCGAAGATCACAGACATGGACACAAACTTAGAACCTGTG
rabbit   ------------------------------------------------------------

human    ACTCGTTCACCTCAAAATTTAAGGAACACCTTGGCCACTTCAGAAGCCACCACAGATACA
rabbit   ------------------------------------------------------------

human    CACACAATGCATCCTTCTATAAACACAGCAGTGGCCAATGTGGGGACCACCAGTTCACCA
rabbit   ------------------------------------------------------------

human    AATGAATTCTATTTTACTGTCTCACCTGACTCAGACCCATATAAAGCCACATCCGCAGTA
rabbit   ------------------------------------------------------------

human    GTTATCACTTCCACCTCGGGGGACTCAATAGTTTCCACATCAATGCCTAGATCCTCTGCG
rabbit   ------------------------------------------------------------

human    ATGAAAAAGATTGAGTCTGAGACAACTTTCTCCCTGATATTTAGACTGAGGGAGACTAGC
rabbit   ------------------------------------------------------------

human    ACCTCCCAGAAAATTGGCTCATCCTCAGACACAAGCACGGTCTTTGACAAAGCATTCACT
rabbit   ------------------------------------------------------------
```

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human    GCTGCTACTACTGAGGTCTCCAGAACAGAACTCACCTCCTCTAGCAGAACATCCATCCAA
rabbit   ------------------------------------------------------------

human    GGCACTGAAAAGCCCACAATGTCACCGGACACCTCCACAAGATCTGTCACCATGCTTTCT
rabbit   ------------------------------------------------------------

human    ACTTTTGCTGGCCTGACAAAATCCGAAGAAAGGACCATTGCCACCCAAACAGGTCCTCAT
rabbit   ------------------------------------------------------------

human    AGGGCGACATCACAGGGTACCCTTACCTGGGACACATCAATCACAACCTCACAGGCAGGG
rabbit   ------------------------------------------------------------

human    ACCCACTCAGCTATGACTCATGGATTTTCACAATTAGATTTGTCCACTCTTACGAGTAGA
rabbit   ------------------------------------------------------------

human    GTTCCTGAGTACATATCAGGGACAAGCCCACCCTCTGTGGAAAAAACCAGCTCTTCCTCT
rabbit   ------------------------------------------------------------

human    TCCCTTCTGTCTTTACCAGCAATAACCTCACCGTCCCCTGTACCTACTACATTACCAGAA
rabbit   ------------------------------------------------------------

human    AGTAGGCCGTCTTCTCCTGTTCATCTGACTTCACTCCCCACCTCTGGCCTAGTGAAGACC
rabbit   ------------------------------------------------------------

human    ACAGATATGCTGGCATCTGTGGCCAGTTTACCTCCAAACTTGGGCAGCACCTCACATAAG
rabbit   ------------------------------------------------------------
```

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human           ATACCGACTACTTCAGAAGACATTAAAGATACAGAGAAAATGTATCCTTCCACAAACATA
rabbit          ------------------------------------------------------------

human           GCAGTAACCAATGTGGGGACCACCACTTCTGAAAAGGAATCTTATTCGTCTGTCCCAGCC
rabbit          ------------------------------------------------------------

human           TACTCAGAACCACCCAAAGTCACCTCTCCAATGGTTACCTCTTTCAACATAAGGGACACC
rabbit          ------------------------------------------------------------

human           ATTGTTTCCACATCCATGCCTGGCTCCTCTGAGATTACAAGGATTGAGATGGAGTCAACA
rabbit          ------------------------------------------------------------

human           TTCTCCCTGGCTCATGGGCTGAAGGGAACCAGCACCTCCCAGGACCCCATCGTATCCACA
rabbit          ------------------------------------------------------------

human           GAGAAAAGTGCTGTCCTTCACAAGTTGACCACTGGTGCTACTGAGACCTCTAGGACAGAA
rabbit          ------------------------------------------------------------

human           GTTGCCTCTTCTAGAAGAACATCCATTCCAGGCCCTGATCATTCCACAGAGTCACCAGAC
rabbit          ------------------------------------------------------------

human           ATCTCCACTGAAGTGATCCCCAGCCTGCCTATCTCCCTTGGCATTACAGAATCTTCAAAT
rabbit          ------------------------------------------------------------

human           ATGACCATCATCACTCGAACAGGTCCTCCTCTTGGCTCTACATCACAGGGCACATTTACC
rabbit          ------------------------------------------------------------
```

```
human    TTGGACACACCAACTACATCCTCCAGGGCAGGAACACACTCGATGGCGACTCAGGAATTT
rabbit   ------------------------------------------------------------

human    CCACACTCAGAAATGACCACTGTCATGAACAAGGACCCTGAGATTCTATCATGGACAATC
rabbit   ------------------------------------------------------------

human    CCTCCTTCTATAGAGAAAACCAGCTTCTCCTCTTCCCTGATGCCTTCACCAGCCATGACT
rabbit   ------------------------------------------------------------

human    TCACCTCCTGTTTCCTCAACATTACCAAAGACCATTCACACCACTCCTTCTCCTATGACC
rabbit   ------------------------------------------------------------

human    TCACTGCTCACCCCTAGCCTAGTGATGACCACAGACACATTGGGCACAAGCCCAGAACCT
rabbit   ------------------------------------------------------------

human    ACAACCAGTTCACCTCCAAATTTGAGCAGTACCTCACATGAGATACTGACAACAGATGAA
rabbit   ------------------------------------------------------------

human    GACACCACAGCTATAGAAGCCATGCATCCTTCCACAAGCACAGCAGCGACTAATGTGGAA
rabbit   ------------------------------------------------------------

human    ACCACCAGTTCTGGACATGGGTCACAATCCTCTGTCCTAGCTGACTCAGAAAAAACCAAG
rabbit   ------------------------------------------------------------

human    GCCACAGCTCCAATGGATACCACCTCCACCATGGGGCATACAACTGTTTCCACATCAATG
rabbit   ------------------------------------------------------------
```

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human    TCTGTTTCCTCTGAGACTACAAAAATTAAGAGAGAGTCAACATATTCCTTGACTCCTGGA
rabbit   ------------------------------------------------------------

human    CTGAGAGAGACCAGCATTTCCCAAAATGCCAGCTTTTCCACTGACACAAGTATTGTTCTT
rabbit   ------------------------------------------------------------

human    TCAGAAGTCCCCACTGGTACTACTGCTGAGGTCTCCAGGACAGAAGTCACCTCCTCTGGT
rabbit   ------------------------------------------------------------

human    AGAACATCCATCCCTGGCCCTTCTCAGTCCACAGTTTTGCCAGAAATATCCACAAGAACA
rabbit   ------------------------------------------------------------

human    ATGACAAGGCTCTTTGCCTCGCCCACCATGACAGAATCAGCAGAAATGACCATCCCCACT
rabbit   ------------------------------------------------------------

human    CAAACAGGTCCTTCTGGGTCTACCTCACAGGATACCCTTACCTTGGACACATCCACCACA
rabbit   ------------------------------------------------------------

human    AAGTCCCAGGCAAAGACTCATTCAACTTTGACTCAGAGATTTCCACACTCAGAGATGACC
rabbit   ------------------------------------------------------------

human    ACTCTCATGAGCAGAGGTCCTGGAGATATGTCATGGCAAAGCTCTCCCTCTCTGGAAAAT
rabbit   ------------------------------------------------------------

human    CCCAGCTCTCTCCCTTCCCTGCTGTCTTTACCTGCCACAACCTCACCTCCTCCCATTTCC
rabbit   ------------------------------------------------------------
```

```
human    TCCACATTACCAGTGACTATCTCCTCCTCTCCTCTTCCTGTGACTTCACTTCTCACCTCT
rabbit   ------------------------------------------------------------

human    AGCCCGGTAACGACCACAGACATGTTACACACAAGCCCAGAACTTGTAACCAGTTCACCT
rabbit   ------------------------------------------------------------

human    CCAAAGCTGAGCCACACTTCAGATGAGAGACTGACCACTGGCAAGGACACCACAAATACA
rabbit   ------------------------------------------------------------

human    GAAGCTGTGCATCCTTCCACAAACACAGCAGCGTCCAATGTGGAGATTCCCAGCTCTGGA
rabbit   ------------------------------------------------------------

human    CATGAATCCCCTTCCTCTGCCTTAGCTGACTCAGAGACATCCAAAGCCACATCACCAATG
rabbit   ------------------------------------------------------------

human    TTTATTACCTCCACCCAGGAGGATACAACTGTTGCCATATCAACCCCTCACTTCTTGGAG
rabbit   ------------------------------------------------------------

human    ACTAGCAGAATTCAGAAAGAGTCAATTTCCTCCCTGAGCCCTAAATTGAGGGAGACAGGC
rabbit   ------------------------------------------------------------

human    AGTTCTGTGGAGACAAGCTCAGCCATAGAGACAAGTGCTGTCCTTTCTGAAGTGTCCATT
rabbit   ------------------------------------------------------------

human    GGTGCTACTACTGAGATCTCCAGGACAGAAGTCACCTCCTCTAGCAGAACATCCATCTCT
rabbit   ------------------------------------------------------------
```

```
human    GGTTCTGCTGAGTCCACAATGTTGCCAGAAATATCCACCACAAGAAAAATCATTAAGTTC
rabbit   ------------------------------------------------------------

human    CCTACTTCCCCCATCCTGGCAGAATCATCAGAAATGACCATCAAGACCCAAACAAGTCCT
rabbit   ------------------------------------------------------------

human    CCTGGGTCTACATCAGAGAGTACCTTTACATTAGACACATCAACCACTCCCTCCTTGGTA
rabbit   ------------------------------------------------------------

human    ATAACCCATTCGACTATGACTCAGAGATTGCCACACTCAGAGATAACCACTCTTGTGAGT
rabbit   ------------------------------------------------------------

human    AGAGGTGCTGGGGATGTGCCACGGCCCAGCTCTCTCCCTGTGGAAGAAACAAGCCCTCCA
rabbit   ------------------------------------------------------------

human    TCTTCCCAGCTGTCTTTATCTGCCATGATCTCACCTTCTCCTGTTTCTTCCACATTACCA
rabbit   ------------------------------------------------------------

human    GCAAGTAGCCACTCCTCTTCTGCTTCTGTGACTTCACTTCTCACACCAGGCCAAGTGAAG
rabbit   ------------------------------------------------------------

human    ACTACTGAGGTGTTGGACGCAAGTGCAGAACCTGAAACCAGTTCACCTCCAAGTTTGAGC
rabbit   ------------------------------------------------------------

human    AGCACCTCAGTTGAAATACTGGCCACCTCTGAAGTCACCACAGATACGGAGAAAATTCAT
rabbit   ------------------------------------------------------------
```

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human    CCTTTCTCAAACACGGCAGTAACCAAAGTTGGAACTTCCAGTTCTGGACATGAATCCCCT
rabbit   ------------------------------------------------------------

human    TCCTCTGTCCTACCTGACTCAGAGACAACCAAAGCCACATCGGCAATGGGTACCATCTCC
rabbit   ------------------------------------------------------------

human    ATTATGGGGGATACAAGTGTTTCTACATTAACTCCTGCCTTATCTAACACTAGGAAAATT
rabbit   ------------------------------------------------------------

human    CAGTCAGAGCCAGCTTCCTCACTGACCACCAGATTGAGGGAGACCAGCACCTCTGAAGAG
rabbit   ------------------------------------------------------------

human    ACCAGCTTAGCCACAGAAGCAAACACTGTTCTTTCTAAAGTGTCCACTGGTGCTACTACT
rabbit   ------------------------------------------------------------

human    GAGGTCTCCAGGACAGAAGCCATCTCCTTTAGCAGAACATCCATGTCAGGCCCTGAGCAG
rabbit   ------------------------------------------------------------

human    TCCACAATGTCACAAGACATCTCCATAGGAACCATCCCCAGGATTTCTGCCTCCTCTGTC
rabbit   ------------------------------------------------------------

human    CTGACAGAATCTGCAAAAATGACCATCACAACCCAAACAGGTCCTTCGGAGTCTACACTA
rabbit   ------------------------------------------------------------

human    GAAAGTACCCTTAATTTGAACACAGCAACCACACCCTCTTGGGTGGAAACCCACTCTATA
rabbit   ------------------------------------------------------------
```

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human           GTAATTCAGGGATTTCCACACCCAGAGATGACCACTTCCATGGGCAGAGGTCCTGGAGGT
rabbit          ------------------------------------------------------------

human           GTGTCATGGCCTAGCCCTCCCTTTGTGAAAGAAACCAGCCCTCCATCCTCCCCGCTGTCT
rabbit          ------------------------------------------------------------

human           TTACCTGCCGTGACCTCACCTCATCCTGTTTCCACCACATTCCTAGCACATATCCCCCCC
rabbit          ------------------------------------------------------------

human           TCTCCCCTTCCTGTGACTTCACTTCTCACCTCTGGCCCGGCGACAACCACAGATATCTTG
rabbit          ------------------------------------------------------------

human           GGTACAAGCACAGAACCTGGAACCAGTTCATCTTCAAGTTTGAGCACCACCTCCCATGAG
rabbit          ------------------------------------------------------------

human           AGACTGACCACTTACAAAGACACTGCACATACAGAAGCCGTGCATCCTTCCACAAACACA
rabbit          ------------------------------------------------------------

human           GGAGGGACCAATGTGGCAACCACCAGCTCTGGATATAAATCACAGTCCTCTGTCCTAGCT
rabbit          ------------------------------------------------------------

human           GACTCATCTCCAATGTGTACCACCTCCACCATGGGGGATACAAGTGTTCTCACATCAACT
rabbit          ------------------------------------------------------------

human           CCTGCCTTCCTTGAGACTAGGAGGATTCAGACAGAGCTAGCTTCCTCCCTGACCCCTGGA
rabbit          ------------------------------------------------------------
```

```
human    TTGAGGGAGTCCAGCGGCTCTGAAGGGACCAGCTCAGGCACCAAGATGAGCACTGTCCTC
rabbit   ------------------------------------------------------------

human    TCTAAAGTGCCCACTGGTGCTACTACTGAGATCTCCAAGGAAGACGTCACCTCCATCCCA
rabbit   ------------------------------------------------------------

human    GGTCCCGCTCAATCCACAATATCACCAGACATCTCCACAAGAACCGTCAGCTGGTTCTCT
rabbit   ------------------------------------------------------------

human    ACATCCCCTGTCATGACAGAATCAGCAGAAATAACCATGAACACCCATACAAGTCCTTTA
rabbit   ------------------------------------------------------------

human    GGGGCCACAACACAAGGCACCAGTACTTTGGACACGTCAAGCACAACCTCTTTGACAATG
rabbit   ------------------------------------------------------------

human    ACACACTCAACTATATCTCAAGGATTTTCACACTCACAGATGAGCACTCTTATGAGGAGG
rabbit   ------------------------------------------------------------

human    GGTCCTGAGGATGTATCATGGATGAGCCCTCCCCTTCTGGAAAAAACTAGACCTTCCTTT
rabbit   ------------------------------------------------------------

human    TCTCTGATGTCTTCACCAGCCACAACTTCACCTTCTCCTGTTTCCTCCACATTACCAGAG
rabbit   ------------------------------------------------------------

human    AGCATCTCTTCCTCTCCTCTTCCTGTGACTTCACTCCTCACGTCTGGCTTGGCAAAAACT
rabbit   ------------------------------------------------------------
```

```
human    ACAGATATGTTGCACAAAAGCTCAGAACCTGTAACCAACTCACCTGCAAATTTGAGCAGC
rabbit   ------------------------------------------------------------

human    ACCTCAGTTGAAATACTGGCCACCTCTGAAGTCACCACAGATACAGAGAAAACTCATCCT
rabbit   ------------------------------------------------------------

human    TCTTCAAACAGAACAGTGACCGATGTGGGGACCTCCAGTTCTGGACATGAATCCACTTCC
rabbit   ------------------------------------------------------------

human    TTTGTCCTAGCTGACTCACAGACATCCAAAGTCACATCTCCAATGGTTATTACCTCCACC
rabbit   ------------------------------------------------------------

human    ATGGAGGATACGAGTGTCTCCACATCAACTCCTGGCTTTTTTGAGACTAGCAGAATTCAG
rabbit   ------------------------------------------------------------

human    ACAGAACCAACATCCTCCCTGACCCTTGGACTGAGAAAGACCAGCAGCTCTGAGGGGACC
rabbit   ------------------------------------------------------------

human    AGCTTAGCCACAGAGATGAGCACTGTCCTTTCTGGAGTGCCCACTGGTGCCACTGCTGAA
rabbit   ------------------------------------------------------------

human    GTCTCCAGGACAGAAGTCACCTCCTCTAGCAGAACATCCATCTCAGGCTTTGCTCAGCTC
rabbit   ------------------------------------------------------------

human    ACAGTGTCACCAGAGACTTCCACAGAAACCATCACCAGACTCCCTACCTCCAGCATAATG
rabbit   ------------------------------------------------------------
```

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human           ACAGAATCAGCAGAAATGATGATCAAGACACAAACAGATCCTCCTGGGTCTACACCAGAG
rabbit          ------------------------------------------------------------

human           AGTACTCATACTGTGGACATATCAACAACACCCAACTGGGTAGAAACCCACTCGACTGTG
rabbit          ------------------------------------------------------------

human           ACTCAGAGATTTTCACACTCAGAGATGACCACTCTTGTGAGCAGAAGCCCTGGTGATATG
rabbit          ------------------------------------------------------------

human           TTATGGCCTAGTCAATCCTCTGTGGAAGAAACCAGCTCTGCCTCTTCCCTGCTGTCTCTG
rabbit          ------------------------------------------------------------

human           CCTGCCACGACCTCACCTTCTCCTGTTTCCTCTACATTAGTAGAGGATTTCCCTTCCGCT
rabbit          ------------------------------------------------------------

human           TCTCTTCCTGTGACTTCTCTTCTCAACCCTGGCCTGGTGATAACCACAGACAGGATGGGC
rabbit          ------------------------------------------------------------

human           ATAAGCAGAGAACCTGGAACCAGTTCCACTTCAAATTTGAGCAGCACCTCCCATGAGAGA
rabbit          ------------------------------------------------------------

human           CTGACCACTTTGGAAGACACTGTAGATACAGAAGACATGCAGCCTTCCACACACACAGCA
rabbit          ------------------------------------------------------------

human           GTGACCAACGTGAGGACCTCCATTTCTGGACATGAATCACAATCTTCTGTCCTATCTGAC
rabbit          ------------------------------------------------------------
```

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human    TCAGAGACACCCAAAGCCACATCTCCAATGGGTACCACCTACACCATGGGGGAAACGAGT
rabbit   ------------------------------------------------------------

human    GTTTCCATATCCACTTCTGACTTCTTTGAGACCAGCAGAATTCAGATAGAACCAACATCC
rabbit   ------------------------------------------------------------

human    TCCCTGACTTCTGGATTGAGGGAGACCAGCAGCTCTGAGAGGATCAGCTCAGCCACAGAG
rabbit   ------------------------------------------------------------

human    GGAAGCACTGTCCTTTCTGAAGTGCCCAGTGGTGCTACCACTGAGGTCTCCAGGACAGAA
rabbit   ------------------------------------------------------------

human    GTGATATCCTCTAGGGGAACATCCATGTCAGGGCCTGATCAGTTCACCATATCACCAGAC
rabbit   ------------------------------------------------------------

human    ATCTCTACTGAAGCGATCACCAGGCTTTCTACTTCCCCCATTATGACAGAATCAGCAGAA
rabbit   ------------------------------------------------------------

human    AGTGCCATCACTATTGAGACAGGTTCTCCTGGGGCTACATCAGAGGGTACCCTCACCTTG
rabbit   ------------------------------------------------------------

human    GACACCTCAACAACAACCTTTTGGTCAGGGACCCACTCAACTGCATCTCCAGGATTTTCA
rabbit   ------------------------------------------------------------

human    CACTCAGAGATGACCACTCTTATGAGTAGAACTCCTGGAGATGTGCCATGGCCGAGCCTT
rabbit   ------------------------------------------------------------
```

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human          CCCTCTGTGGAAGAAGCCAGCTCTGTCTCTTCCTCACTGTCTTCACCTGCCATGACCTCA
rabbit         ------------------------------------------------------------

human          ACTTCTTTTTTCTCCACATTACCAGAGAGCATCTCCTCCTCTCCTCATCCTGTGACTGCA
rabbit         ------------------------------------------------------------

human          CTTCTCACCCTTGGCCCAGTGAAGACCACAGACATGTTGCGCACAAGCTCAGAACCTGAA
rabbit         ------------------------------------------------------------

human          ACCAGTTCACCTCCAAATTTGAGCAGCACCTCAGCTGAAATATTAGCCACGTCTGAAGTC
rabbit         ------------------------------------------------------------

human          ACCAAAGATAGAGAGAAAATTCATCCCTCCTCAAACACACCTGTAGTCAATGTAGGGACT
rabbit         ------------------------------------------------------------

human          GTGATTTATAAACATCTATCCCCTTCCTCTGTTTTGGCTGACTTAGTGACAACAAAACCC
rabbit         ------------------------------------------------------------

human          ACATCTCCAATGGCTACCACCTCCACTCTGGGGAATACAAGTGTTTCCACATCAACTCCT
rabbit         ------------------------------------------------------------

human          GCCTTCCCAGAAACTATGATGACACAGCCAACTTCCTCCCTGACTTCTGGATTAAGGGAG
rabbit         ------------------------------------------------------------

human          ATCAGTACCTCTCAAGAGACCAGCTCAGCAACAGAGAGAAGTGCTTCTCTTTCTGGAATG
rabbit         ------------------------------------------------------------
```

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human    CCCACTGGTGCTACTACTAAGGTCTCCAGAACAGAAGCCCTCTCCTTAGGCAGAACATCC
rabbit   ------------------------------------------------------------

human    ACCCCAGGTCCTGCTCAATCCACAATATCACCAGAAATCTCCACGGAAACCATCACTAGA
rabbit   ------------------------------------------------------------

human    ATTTCTACTCCCCTCACCACGACAGGATCAGCAGAAATGACCATCACCCCCAAAACAGGT
rabbit   ------------------------------------------------------------

human    CATTCTGGGGCATCCTCACAAGGTACCTTTACCTTGGACACATCAAGCAGAGCCTCCTGG
rabbit   ------------------------------------------------------------

human    CCAGGAACTCACTCAGCTGCAACTCACAGATCTCCACACTCAGGGATGACCACTCCTATG
rabbit   ------------------------------------------------------------

human    AGCAGAGGTCCTGAGGATGTGTCATGGCCAAGCCGCCCATCAGTGGAAAAAACTAGCCCT
rabbit   ------------------------------------------------------------

human    CCATCTTCCCTGGTGTCTTTATCTGCAGTAACCTCACCTTCGCCACTTTATTCCACACCA
rabbit   ------------------------------------------------------------

human    TCTGAGAGTAGCCACTCATCTCCTCTCCGGGTGACTTCTCTTTTCACCCCTGTCATGATG
rabbit   ------------------------------------------------------------

human    AAGACCACAGACATGTTGGACACAAGCTTGGAACCTGTGACCACTTCACCTCCCAGTATG
rabbit   ------------------------------------------------------------
```

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human           AATATCACCTCAGATGAGAGTCTGGCCACTTCTAAAGCCACCATGGAGACAGAGGCAATT
rabbit          ------------------------------------------------------------

human           CAGCTTTCAGAAAACACAGCTGTGACTCAGATGGGCACCATCAGCGCTAGACAAGAATTC
rabbit          ------------------------------------------------------------

human           TATTCCTCTTATCCAGGCCTCCCAGAGCCATCCAAAGTGACATCTCCAGTGGTCACCTCT
rabbit          ------------------------------------------------------------

human           TCCACCATAAAAGACATTGTTTCTACAACCATACCTGCTTCCTCTGAGATAACAAGAATT
rabbit          ------------------------------------------------------------

human           GAGATGGAGTCAACATCCACCCTGACCCCCACACCAAGGGAGACCAGCACCTCCCAGGAG
rabbit          ------------------------------------------------------------

human           ATCCACTCAGCCACAAAGCCAAGCACTGTTCCTTACAAGGCACTCACTAGTGCCACGATT
rabbit          ------------------------------------------------------------

human           GAGGACTCCATGACACAAGTCATGTCCTCTAGCAGAGGACCTAGCCCTGATCAGTCCACA
rabbit          ------------------------------------------------------------

human           ATGTCACAAGACATATCCACTGAAGTGATCACCAGGCTCTCTACCTCCCCCATCAAGACA
rabbit          ------------------------------------------------------------

human           GAATCTACAGAAATGACCATTACCACCCAAACAGGTTCTCCTGGGGCTACATCAAGGGGT
rabbit          ------------------------------------------------------------
```

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human    ACCCTTACCTTGGACACTTCAACAACTTTTATGTCAGGGACCCACTCAACTGCATCTCAA
rabbit   ------------------------------------------------------------

human    GGATTTTCACACTCACAGATGACCGCTCTTATGAGTAGAACTCCTGGAGATGTGCCATGG
rabbit   ------------------------------------------------------------

human    CTAAGCCATCCCTCTGTGGAAGAAGCCAGCTCTGCCTCTTTCTCACTGTCTTCACCTGTC
rabbit   ------------------------------------------------------------

human    ATGACCTCATCTTCTCCCGTTTCTTCCACATTACCAGACAGCATCCACTCTTCTTCGCTT
rabbit   ------------------------------------------------------------

human    CCTGTGACATCACTTCTCACCTCAGGGCTGGTGAAGACCACAGAGCTGTTGGGCACAAGC
rabbit   ------------------------------------------------------------

human    TCAGAACCTGAAACCAGTTCACCCCCAAATTTGAGCAGCACCTCAGCTGAAATACTGGCC
rabbit   ------------------------------------------------------------

human    ATCACTGAAGTCACTACAGATACAGAGAAACTGGAGATGACCAATGTGGTAACCTCAGGT
rabbit   ------------------------------------------------------------

human    TATACACATGAATCTCCTTCCTCTGTCCTAGCTGACTCAGTGACAACAAAGGCCACATCT
rabbit   ------------------------------------------------------------

human    TCAATGGGTATCACCTACCCCACAGGAGATACAAATGTTCTCACATCAACCCCTGCCTTC
rabbit   ------------------------------------------------------------
```

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human    TCTGACACCAGTAGGATTCAAACAAAGTCAAAGCTCTCACTGACTCCTGGGTTGATGGAG
rabbit   ------------------------------------------------------------

human    ACCAGCATCTCTGAAGAGACCAGCTCTGCCACAGAAAAAAGCACTGTCCTTTCTAGTGTG
rabbit   ------------------------------------------------------------

human    CCCACTGGTGCTACTACTGAGGTCTCCAGGACAGAAGCCATCTCTTCTAGCAGAACATCC
rabbit   ------------------------------------------------------------

human    ATCCCAGGCCCTGCTCAATCCACAATGTCATCAGACACCTCCATGGAAACCATCACTAGA
rabbit   ------------------------------------------------------------

human    ATTTCTACCCCCCTCACAAGGAAAGAATCAACAGACATGGCCATCACCCCCAAAACAGGT
rabbit   ------------------------------------------------------------

human    CCTTCTGGGGCTACCTCGCAGGGTACCTTTACCTTGGACTCATCAAGCACAGCCTCCTGG
rabbit   ------------------------------------------------------------

human    CCAGGAACTCACTCAGCTACAACTCAGAGATTTCCACAGTCAGTGGTGACAACTCCTATG
rabbit   ------------------------------------------------------------

human    AGCAGAGGTCCTGAGGATGTGTCATGGCCAAGCCCGCTGTCTGTGGAAAAAAACAGCCCT
rabbit   ------------------------------------------------------------

human    CCATCTTCCCTGGTATCTTCATCTTCAGTAACCTCACCTTCGCCACTTTATTCCACACCA
rabbit   ------------------------------------------------------------
```

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human    TCTGGGAGTAGCCACTCCTCTCCTGTCCCTGTCACTTCTCTTTTCACCTCTATCATGATG
rabbit   ------------------------------------------------------------

human    AAGGCCACAGACATGTTGGATGCAAGTTTGGAACCTGAGACCACTTCAGCTCCCAATATG
rabbit   ------------------------------------------------------------

human    AATATCACCTCAGATGAGAGTCTGGCCGCTTCTAAAGCCACCACGGAGACAGAGGCAATT
rabbit   ------------------------------------------------------------

human    CACGTTTTTGAAAATACAGCAGCGTCCCATGTGGAAACCACCAGTGCTACAGAGGAACTC
rabbit   ------------------------------------------------------------

human    TATTCCTCTTCCCCAGGCTTCTCAGAGCCAACAAAAGTGATATCTCCAGTGGTCACCTCT
rabbit   ------------------------------------------------------------

human    TCCTCTATAAGAGACAACATGGTTTCCACAACAATGCCTGGCTCCTCTGGCATTACAAGG
rabbit   ------------------------------------------------------------

human    ATTGAGATAGAGTCAATGTCATCTCTGACCCCTGGACTGAGGGAGACCAGAACCTCCCAG
rabbit   ------------------------------------------------------------

human    GACATCACCTCATCCACAGAGACAAGCACTGTCCTTTACAAGATGCCCTCTGGTGCCACT
rabbit   ------------------------------------------------------------

human    CCTGAGGTCTCCAGGACAGAAGTTATGCCCTCTAGCAGAACATCCATTCCTGGCCCTGCT
rabbit   ------------------------------------------------------------
```

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human    CAGTCCACAATGTCACTAGACATCTCCGATGAAGTTGTCACCAGGCTGTCTACCTCTCCC
rabbit   ------------------------------------------------------------

human    ATCATGACAGAATCTGCAGAAATAACCATCACCACCCAAACAGGTTATTCTCTGGCTACA
rabbit   ------------------------------------------------------------

human    TCCCAGGTTACCCTTCCCTTGGGCACCTCAATGACCTTTTTGTCAGGGACCCACTCAACT
rabbit   ------------------------------------------------------------

human    ATGTCTCAAGGACTTTCACACTCAGAGATGACCAATCTTATGAGCAGGGGTCCTGAAAGT
rabbit   ------------------------------------------------------------

human    CTGTCATGGACGAGCCCTCGCTTTGTGGAAACAACTAGATCTTCCTCTTCTCTGACATCA
rabbit   ------------------------------------------------------------

human    TTACCTCTCACGACCTCACTTTCTCCTGTGTCCTCCACATTACTAGACAGTAGCCCCTCC
rabbit   ------------------------------------------------------------

human    TCTCCTCTTCCTGTGACTTCACTTATCCTCCCAGGCCTGGTGAAGACTACAGAAGTGTTG
rabbit   ------------------------------------------------------------

human    GATACAAGCTCAGAGCCTAAAACCAGTTCATCTCCAAATTTGAGCAGCACCTCAGTTGAA
rabbit   ------------------------------------------------------------

human    ATACCGGCCACCTCTGAAATCATGACAGATACAGAGAAAATTCATCCTTCCTCAAACACA
rabbit   ------------------------------------------------------------
```

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human           GCGGTGGCCAAAGTGAGGACCTCCAGTTCTGTTCATGAATCTCATTCCTCTGTCCTAGCT
rabbit          ------------------------------------------------------------

human           GACTCAGAAACAACCATAACCATACCTTCAATGGGTATCACCTCCGCTGTGGACGATACC
rabbit          ------------------------------------------------------------

human           ACTGTTTTCACATCAAATCCTGCCTTCTCTGAGACTAGGAGGATTCCGACAGAGCCAACA
rabbit          ------------------------------------------------------------

human           TTCTCATTGACTCCTGGATTCAGGGAGACTAGCACCTCTGAAGAGACCACCTCAATCACA
rabbit          ------------------------------------------------------------

human           GAAACAAGTGCAGTCCTTTATGGAGTGCCCACTAGTGCTACTACTGAAGTCTCCATGACA
rabbit          ------------------------------------------------------------

human           GAAATCATGTCCTCTAATAGAATACACATCCCTGACTCTGATCAGTCCACGATGTCTCCA
rabbit          ------------------------------------------------------------

human           GACATCATCACTGAAGTGATCACCAGGCTCTCTTCCTCATCCATGATGTCAGAATCAACA
rabbit          ------------------------------------------------------------

human           CAAATGACCATCACCACCCAAAAAAGTTCTCCTGGGGCTACAGCACAGAGTACTCTTACC
rabbit          ------------------------------------------------------------

human           TTGGCCACAACAACAGCCCCCTTGGCAAGGACCCACTCAACTGTTCCTCCTAGATTTTTA
rabbit          ------------------------------------------------------------
```

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human    CACTCAGAGATGACAACTCTTATGAGTAGGAGTCCTGAAAATCCATCATGGAAGAGCTCT
rabbit   ------------------------------------------------------------

human    CTCTTTGTGGAAAAAACTAGCTCTTCATCTTCTCTGTTGTCCTTACCTGTCACGACCTCA
rabbit   ------------------------------------------------------------

human    CCTTCTGTTTCTTCCACATTACCGCAGAGTATCCCTTCCTCCTCTTTTTCTGTGACTTCA
rabbit   ------------------------------------------------------------

human    CTCCTCACCCCAGGCATGGTGAAGACTACAGACACAAGCACAGAACCTGGAACCAGTTTA
rabbit   ------------------------------------------------------------

human    TCTCCAAATCTGAGTGGCACCTCAGTTGAAATACTGGCTGCCTCTGAAGTCACCACAGAT
rabbit   ------------------------------------------------------------

human    ACAGAGAAAATTCATCCTTCTTCAAGCATGGCAGTGACCAATGTGGGAACCACCAGTTCT
rabbit   ------------------------------------------------------------

human    GGACATGAACTATATTCCTCTGTTTCAATCCACTCGGAGCCATCCAAGGCTACATACCCA
rabbit   ------------------------------------------------------------

human    GTGGGTACTCCCTCTTCCATGGCTGAAACCTCTATTTCCACATCAATGCCTGCTAATTTT
rabbit   ------------------------------------------------------------

human    GAGACCACAGGATTTGAGGCTGAGCCATTTTCTCATTTGACTTCTGGATTTAGGAAGACA
rabbit   ------------------------------------------------------------
```

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human          AACATGTCCCTGGACACCAGCTCAGTCACACCAACAAATACACCTTCTTCTCCTGGGTCC
rabbit         ------------------------------------------------------------

human          ACTCACCTTTTACAGAGTTCCAAGACTGATTTCACCTCTTCTGCAAAAACATCATCCCCA
rabbit         ------------------------------------------------------------

human          GACTGGCCTCCAGCCTCACAGTATACTGAAATTCCAGTGGACATAATCACCCCCTTTAAT
rabbit         ------------------------------------------------------------

human          GCTTCTCCATCTATTACGGAGTCCACTGGGATAACCTCCTTCCCAGAATCCAGGTTTACT
rabbit         ------------------------------------------------------------

human          ATGTCTGTAACAGAAAGTACTCATCATCTGAGTACAGATTTGCTGCCTTCAGCTGAGACT
rabbit         ------------------------------------------------------------

human          ATTTCCACTGGCACAGTGATGCCTTCTCTATCAGAGGCCATGACTTCATTTGCCACCACT
rabbit         ------------------------------------------------------------

human          GGAGTTCCACGAGCCATCTCAGGTTCAGGTAGTCCATTCTCTAGGACAGAGTCAGGCCCT
rabbit         ------------------------------------------------------------

human          GGGGATGCTACTCTGTCCACCATTGCAGAGAGCCTGCCTTCATCCACTCCTGTGCCATTC
rabbit         ------------------------------------------------------------

human          TCCTCTTCAACCTTCACTACCACTGATTCTTCAACCATCCCAGCCCTCCATGAGATAACT
rabbit         ------------------------------------------------------------
```

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human    TCCTCTTCAGCTACCCCATATAGAGTGGACACCAGTCTTGGGACAGAGAGCAGCACTACT
rabbit   ------------------------------------------------------------

human    GAAGGACGCTTGGTTATGGTCAGTACTTTGGACACTTCAAGCCAACCAGGCAGGACATCT
rabbit   ------------------------------------------------------------

human    TCATCACCCATTTTGGATACCAGAATGACAGAGAGCGTTGAGCTGGGAACAGTGACAAGT
rabbit   ------------------------------------------------------------

human    GCTTATCAAGTTCCTTCACTCTCAACACGGTTGACAAGAACTGATGGCATTATGGAACAC
rabbit   ------------------------------------------------------------

human    ATCACAAAAATACCCAATGAAGCAGCACACAGAGGTACCATAAGACCAGTCAAAGGCCCT
rabbit   ------------------------------------------------------------

human    CAGACATCCACTTCGCCTGCCAGTCCTAAAGGACTACACACAGGAGGGACAAAAAGAATG
rabbit   ------------------------------------------------------------

human    GAGACCACCACCACAGCTCTGAAGACCACCACCACAGCTCTGAAGACCACTTCCAGAGCC
rabbit   ------------------------------------------------------------

human    ACCTTGACCACCAGTGTCTATACTCCCACTTTGGGAACACTGACTCCCCTCAATGCATCA
rabbit   ------------------------------------------------------------

human    ATGCAAATGGCCAGCACAATCCCCACAGAAATGATGATCACAACCCCATATGTTTTCCCT
rabbit   ------------------------------------------------------------
```

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human          GATGTTCCAGAAACGACATCCTCATTGGCTACCAGCCTGGGAGCAGAAACCAGCACAGCT
rabbit         ------------------------------------------------------------

human          CTTCCCAGGACAACCCCATCTGTTTTCAATAGAGAATCAGAGACCACAGCCTCACTGGTC
rabbit         ------------------------------------------------------------

human          TCTCGTTCTGGGGCAGAGAGAAGTCCGGTTATTCAAACTCTAGATGTTTCTTCTAGTGAG
rabbit         ------------------------------------------------------------

human          CCAGATACAACAGCTTCATGGGTTATCCATCCTGCAGAGACCATCCCAACTGTTTCCAAG
rabbit         ------------------------------------------------------------

human          ACAACCCCCAATTTTTTCCACAGTGAATTAGACACTGTATCTTCCACAGCCACCAGTCAT
rabbit         ------------------------------------------------------------

human          GGGGCAGACGTCAGCTCAGCCATTCCAACAAATATCTCACCTAGTGAACTAGATGCACTG
rabbit         ------------------------------------------------------------

human          ACCCCACTGGTCACTATTTCGGGGACAGATACTAGTACAACATTCCCAACACTGACTAAG
rabbit         ------------------------------------------------------------

human          TCCCCACATGAAACAGAGACAAGAACCACATGGCTCACTCATCCTGCAGAGACCAGCTCA
rabbit         ------------------------------------------------------------

human          ACTATTCCCAGAACAATCCCCAATTTTTCTCATCATGAATCAGATGCCACACCTTCAATA
rabbit         ------------------------------------------------------------
```

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human    GCCACCAGTCCTGGGGCAGAAACCAGTTCAGCTATTCCAATTATGACTGTCTCACCTGGT
rabbit   ------------------------------------------------------------

human    GCAGAAGATCTGGTGACCTCACAGGTCACTAGTTCTGGGACAGACAGAAATATGACTATT
rabbit   ------------------------------------------------------------

human    CCAACTTTGACTCTTTCTCCTGGTGAACCAAAGACGATAGCCTCATTAGTCACCCATCCT
rabbit   ------------------------------------------------------------

human    GAAGCACAGACAAGTTCGGCCATTCCAACTTCAACTATCTCGCCTGCTGTATCACGGTTG
rabbit   ------------------------------------------------------------

human    GTGACCTCAATGGTCACCAGTTTGGCGGCAAAGACAAGTACAACTAATCGAGCTCTGACA
rabbit   ------------------------------------------------------------

human    AACTCCCCTGGTGAACCAGCTACAACAGTTTCATTGGTCACGCATCCTGCACAGACCAGC
rabbit   ------------------------------------------------------------

human    CCAACAGTTCCCTGGACAACTTCCATTTTTTTCCATAGTAAATCAGACACCACACCTTCA
rabbit   ------------------------------------------------------------

human    ATGACCACCAGTCATGGGGCAGAATCCAGTTCAGCTGTTCCAACTCCAACTGTTTCAACT
rabbit   ------------------------------------------------------------

human    GAGGTACCAGGAGTAGTGACCCCTTTGGTCACCAGTTCTAGGGCAGTGATCAGTACAACT
rabbit   ------------------------------------------------------------
```

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human           ATTCCAATTCTGACTCTTTCTCCTGGTGAACCAGAGACCACACCTTCAATGGCCACCAGT
rabbit          ------------------------------------------------------------

human           CATGGGGAAGAAGCCAGTTCTGCTATTCCAACTCCAACTGTTTCACCTGGGGTACCAGGA
rabbit          ------------------------------------------------------------

human           GTGGTGACCTCTCTGGTCACTAGTTCTAGGGCAGTGACTAGTACAACTATTCCAATTCTG
rabbit          ------------------------------------------------------------

human           ACTTTTTCTCTTGGTGAACCAGAGACCACACCTTCAATGGCCACCAGTCATGGGACAGAA
rabbit          ------------------------------------------------------------

human           GCTGGCTCAGCTGTTCCAACTGTTTTACCTGAGGTACCAGGAATGGTGACCTCTCTGGTT
rabbit          ------------------------------------------------------------

human           GCTAGTTCTAGGGCAGTAACCAGTACAACTCTTCCAACTCTGACTCTTTCTCCTGGTGAA
rabbit          ------------------------------------------------------------

human           CCAGAGACCACACCTTCAATGGCCACCAGTCATGGGGCAGAAGCCAGCTCAACTGTTCCA
rabbit          ------------------------------------------------------------

human           ACTGTTTCACCTGAGGTACCAGGAGTGGTGACCTCTCTGGTCACTAGTTCTAGTGGAGTA
rabbit          ------------------------------------------------------------

human           AACAGTACAAGTATTCCAACTCTGATTCTTTCTCCTGGTGAACTAGAAACCACACCTTCA
rabbit          ------------------------------------------------------------
```

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human    ATGGCCACCAGTCATGGGGCAGAAGCCAGCTCAGCTGTTCCAACTCCAACTGTTTCACCT
rabbit   ------------------------------------------------------------

human    GGGGTATCAGGAGTGGTGACCCCTCTGGTCACTAGTTCCAGGGCAGTGACCAGTACAACT
rabbit   ------------------------------------------------------------

human    ATTCCAATTCTAACTCTTTCTTCTAGTGAGCCAGAGACCACACCTTCAATGGCCACCAGT
rabbit   ------------------------------------------------------------

human    CATGGGGTAGAAGCCAGCTCAGCTGTTCTAACTGTTTCACCTGAGGTACCAGGAATGGTG
rabbit   ------------------------------------------------------------

human    ACCTCTCTGGTCACTAGTTCTAGAGCAGTAACCAGTACAACTATTCCAACTCTGACTATT
rabbit   ------------------------------------------------------------

human    TCTTCTGATGAACCAGAGACCACAACTTCATTGGTCACCCATTCTGAGGCAAAGATGATT
rabbit   ------------------------------------------------------------

human    TCAGCCATTCCAACTTTAGCTGTCTCCCCTACTGTACAAGGGCTGGTGACTTCACTGGTC
rabbit   ------------------------------------------------------------

human    ACTAGTTCTGGGTCAGAGACCAGTGCGTTTTCAAATCTAACTGTTGCCTCAAGTCAACCA
rabbit   ------------------------------------------------------------

human    GAGACCATAGACTCATGGGTCGCTCATCCTGGGACAGAAGCAAGTTCTGTTGTTCCAACT
rabbit   ------------------------------------------------------------
```

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human    TTGACTGTCTCCACTGGTGAGCCGTTTACAAATATCTCATTGGTCACCCATCCTGCAGAG
rabbit   ------------------------------------------------------------

human    AGTAGCTCAACTCTTCCCAGGACAACCTCAAGGTTTTCCCACAGTGAATTAGACACTATG
rabbit   ------------------------------------------------------------

human    CCTTCTACAGTCACCAGTCCTGAGGCAGAATCCAGCTCAGCCATTTCAACAACTATTTCA
rabbit   ------------------------------------------------------------

human    CCTGGTATACCAGGTGTGCTGACATCACTGGTCACTAGCTCTGGGAGAGACATCAGTGCA
rabbit   ------------------------------------------------------------

human    ACTTTTCCAACAGTGCCTGAGTCCCCACATGAATCAGAGGCAACAGCCTCATGGGTTACT
rabbit   ------------------------------------------------------------

human    CATCCTGCAGTCACCAGCACAACAGTTCCCAGGACAACCCCTAATTATTCTCATAGTGAA
rabbit   ------------------------------------------------------------

human    CCAGACACCACACCATCAATAGCCACCAGTCCTGGGGCAGAAGCCACTTCAGATTTTCCA
rabbit   ------------------------------------------------------------

human    ACAATAACTGTCTCACCTGATGTACCAGATATGGTAACCTCACAGGTCACTAGTTCTGGG
rabbit   ------------------------------------------------------------

human    ACAGACACCAGTATAACTATTCCAACTCTGACTCTTTCTTCTGGTGAGCCAGAGACCACA
rabbit   ------------------------------------------------------------
```

```
human    ACCTCATTTATCACCTATTCTGAGACACACACAAGTTCAGCCATTCCAACTCTCCCTGTC
rabbit   ------------------------------------------------------------

human    TCCCCTGGTGCATCAAAGATGCTGACCTCACTGGTCATCAGTTCTGGGACAGACAGCACT
rabbit   ------------------------------------------------------------

human    ACAACTTTCCCAACACTGACGGAGACCCCATATGAACCAGAGACAACAGCCATACAGCTC
rabbit   ------------------------------------------------------------

human    ATTCATCCTGCAGAGACCAACACAATGGTTCCCAGGACAACTCCCAAGTTTTCCCATAGT
rabbit   ------------------------------------------------------------

human    AAGTCAGACACCACACTCCCAGTAGCCATCACCAGTCCTGGGCCAGAAGCCAGTTCAGCT
rabbit   ------------------------------------------------------------

human    GTTTCAACGACAACTATCTCACCTGATATGTCAGATCTGGTGACCTCACTGGTCCCTAGT
rabbit   ------------------------------------------------------------

human    TCTGGGACAGACACCAGTACAACCTTCCCAACATTGAGTGAGACCCCATATGAACCAGAG
rabbit   ------------------------------------------------------------

human    ACTACAGCCACGTGGCTCACTCATCCTGCAGAAACCAGCACAACGGTTTCTGGGACAATT
rabbit   ------------------------------------------------------------

human    CCCAACTTTTCCCATAGGGGATCAGACACTGCACCCTCAATGGTCACCAGTCCTGGAGTA
rabbit   ------------------------------------------------------------
```

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human          GACACGAGGTCAGGTGTTCCAACTACAACCATCCCACCCAGTATACCAGGGGTAGTGACC
rabbit         ------------------------------------------------------------

human          TCACAGGTCACTAGTTCTGCAACAGACACTAGTACAGCTATTCCAACTTTGACTCCTTCT
rabbit         ------------------------------------------------------------

human          CCTGGTGAACCAGAGACCACAGCCTCATCAGCTACCCATCCTGGGACACAGACTGGCTTC
rabbit         ------------------------------------------------------------

human          ACTGTTCCAATTCGGACTGTTCCCTCTAGTGAGCCAGATACAATGGCTTCCTGGGTCACT
rabbit         ------------------------------------------------------------

human          CATCCTCCACAGACCAGCACACCTGTTTCCAGAACAACCTCCAGTTTTTCCCATAGTAGT
rabbit         ------------------------------------------------------------

human          CCAGATGCCACACCTGTAATGGCCACCAGTCCTAGGACAGAAGCCAGTTCAGCTGTACTG
rabbit         ------------------------------------------------------------

human          ACAACAATCTCACCTGGTGCACCAGAGATGGTGACTTCACAGATCACTAGTTCTGGGGCA
rabbit         ------------------------------------------------------------

human          GCAACCAGTACAACTGTTCCAACTTTGACTCATTCTCCTGGTATGCCAGAGACCACAGCC
rabbit         ------------------------------------------------------------

human          TTATTGAGCACCCATCCCAGAACAGAGACAAGTAAAACATTTCCTGCTTCAACTGTGTTT
rabbit         ------------------------------------------------------------
```

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human    CCTCAAGTATCAGAGACCACAGCCTCACTCACCATTAGACCTGGTGCAGAGACTAGCACA
rabbit   ------------------------------------------------------------

human    GCTCTCCCAACTCAGACAACATCCTCTCTCTTCACCCTACTTGTAACTGGAACCAGCAGA
rabbit   ------------------------------------------------------------

human    GTTGATCTAAGTCCAACTGCTTCACCTGGTGTTTCTGCAAAAACAGCCCCACTTTCCACC
rabbit   ------------------------------------------------------------

human    CATCCAGGGACAGAAACCAGCACAATGATTCCAACTTCAACTCTTTCCCTTGGTTTACTA
rabbit   ------------------------------------------------------------

human    GAGACTACAGGCTTACTGGCCACCAGCTCTTCAGCAGAGACCAGCACGAGTACTCTAACT
rabbit   ------------------------------------------------------------

human    CTGACTGTTTCCCCTGCTGTCTCTGGGCTTTCCAGTGCCTCTATAACAACTGATAAGCCC
rabbit   ------------------------------------------------------------

human    CAAACTGTGACCTCCTGGAACACAGAAACCTCACCATCTGTAACTTCAGTTGGACCCCCA
rabbit   ------------------------------------------------------------

human    GAATTTTCCAGGACTGTCACAGGCACCACTATGACCTTGATACCATCAGAGATGCCAACA
rabbit   ------------------------------------------------------------

human    CCACCTAAAACCAGTCATGGAGAAGGAGTGAGTCCAACCACTATCTTGAGAACTACAATG
rabbit   ------------------------------------------------------------
```

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human    GTTGAAGCCACTAATTTAGCTACCACAGGTTCCAGTCCCACTGTGGCCAAGACAACAACC
rabbit   ------------------------------------------------------------

human    ACCTTCAATACACTGGCTGGAAGCCTCTTTACTCCTCTGACCACACCTGGGATGTCCACC
rabbit   ------------------------------------------------------------

human    TTGGCCTCTGAGAGTGTGACCTCAAGAACAAGTTATAACCATCGGTCCTGGATCTCCACC
rabbit   ------------------------------------------------------------

human    ACCAGCAGTTATAACCGTCGGTACTGGACCCCTGCCACCAGCACTCCAGTGACTTCTACA
rabbit   ------------------------------------------------------------

human    TTCTCCCCAGGGATTTCCACATCCTCCATCCCCAGCTCCACAGCAGCCACAGTCCCATTC
rabbit   ------------------------------------------------------------

human    ATGGTGCCATTCACCCTCAACTTCACCATCACCAACCTGCAGTACGAGGAGGACATGCGG
rabbit   ------------------------------------------------------------

human    CACCCTGGTTCCAGGAAGTTCAACGCCACAGAGAGAGAACTGCAGGGTCTGCTCAAACCC
rabbit   ------------------------------------------------------------

human    TTGTTCAGGAATAGCAGTCTGGAATACCTCTATTCAGGCTGCAGACTAGCCTCACTCAGG
rabbit   ------------------------------------------------------------

human    CCAGAGAAGGATAGCTCAGCCACGGCAGTGGATGCCATCTGCACACATCGCCCTGACCCT
rabbit   ------------------------------------------------------------
```

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human          GAAGACCTCGGACTGGACAGAGAGCGACTGTACTGGGAGCTGAGCAATCTGACAAATGGC
rabbit         ------------------------------------------------------------

human          ATCCAGGAGCTGGGCCCCTACACCCTGGACCGGAACAGTCTCTATGTCAATGGTTTCACC
rabbit         ------------------------------------------------------------

human          CATCGAAGCTCTATGCCCACCACCAGCACTCCTGGGACCTCCACAGTGGATGTGGGAACC
rabbit         ------------------------------------------------------------

human          TCAGGGACTCCATCCTCCAGCCCCAGCCCCACGACTGCTGGCCCTCTCCTGATGCCGTTC
rabbit         ------------------------------------------------------------

human          ACCCTCAACTTCACCATCACCAACCTGCAGTACGAGGAGGACATGCGTCGCACTGGCTCC
rabbit         ------------------------------------------------------------

human          AGGAAGTTCAACACCATGGAGAGTGTCCTGCAGGGTCTGCTCAAGCCCTTGTTCAAGAAC
rabbit         ------------------------------------------------------------

human          ACCAGTGTTGGCCCTCTGTACTCTGGCTGCAGATTGACCTTGCTCAGGCCCGAGAAAGAT
rabbit         ------------------------------------------------------------

human          GGGGCAGCCACTGGAGTGGATGCCATCTGCACCCACCGCCTTGACCCCAAAAGCCCTGGA
rabbit         ------------------------------------------------------------

human          CTCAACAGGGAGCAGCTGTACTGGGAGCTAAGCAAACTGACCAATGACATTGAAGAGCTG
rabbit         ------------------------------------------------------------
```

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human    GGCCCCTACACCCTGGACAGGAACAGTCTCTATGTCAATGGTTTCACCCATCAGAGCTCT
rabbit   ------------------------------------------------------------

human    GTGTCCACCACCAGCACTCCTGGGACCTCCACAGTGGATCTCAGAACCTCAGGGACTCCA
rabbit   ------------------------------------------------------------

human    TCCTCCCTCTCCAGCCCCACAATTATGGCTGCTGGCCCTCTCCTGGTACCATTCACCCTC
rabbit   ------------------------------------------------------------

human    AACTTCACCATCACCAACCTGCAGTATGGGGAGGACATGGGTCACCCTGGCTCCAGGAAG
rabbit   ------------------------------------------------------------

human    TTCAACACCACAGAGAGGGTCCTGCAGGGTCTGCTTGGTCCCATATTCAAGAACACCAGT
rabbit   ------------------------------------------------------------

human    GTTGGCCCTCTGTACTCTGGCTGCAGACTGACCTCTCTCAGGTCTGAGAAGGATGGAGCA
rabbit   ------------------------------------------------------------

human    GCCACTGGAGTGGATGCCATCTGCATCCATCATCTTGACCCCAAAAGCCCTGGACTCAAC
rabbit   ------------------------------------------------------------

human    AGAGAGCGGCTGTACTGGGAGCTGAGCCAACTGACCAATGGCATCAAAGAGCTGGGCCCC
rabbit   ------------------------------------------------------------

human    TACACCCTGGACAGGAACAGTCTCTATGTCAATGGTTTCACCCATCGGACCTCTGTGCCC
rabbit   ------------------------------------------------------------
```

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human           ACCAGCAGCACTCCTGGGACCTCCACAGTGGACCTTGGAACCTCAGGGACTCCATTCTCC
rabbit          ------------------------------------------------------------

human           CTCCCAAGCCCCGCAACTGCTGGCCCTCTCCTGGTGCTGTTCACCCTCAACTTCACCATC
rabbit          ------------------------------------------------------------

human           ACCAACCTGAAGTATGAGGAGGACATGCATCGCCCTGGCTCCAGGAAGTTCAACACCACT
rabbit          ------------------------------------------------------------

human           GAGAGGGTCCTGCAGACTCTGCTTGGTCCTATGTTCAAGAACACCAGTGTTGGCCTTCTG
rabbit          ------------------------------------------------------------

human           TACTCTGGCTGCAGACTGACCTTGCTCAGGTCCGAGAAGGATGGAGCAGCCACTGGAGTG
rabbit          ------------------------------------------------------------

human           GATGCCATCTGCACCCACCGTCTTGACCCCAAAAGCCCTGGAGTGGACAGGGAGCAGCTA
rabbit          ------------------------------------------------------------

human           TACTGGGAGCTGAGCCAGCTGACCAATGGCATCAAAGAGCTGGGCCCCTACACCCTGGAC
rabbit          ------------------------------------------------------------

human           AGGAACAGTCTCTATGTCAATGGTTTCACCCATTGGATCCCTGTGCCCACCAGCAGCACT
rabbit          ------------------------------------------------------------

human           CCTGGGACCTCCACAGTGGACCTTGGGTCAGGGACTCCATCCTCCCTCCCCAGCCCCACA
rabbit          ------------------------------------------------------------
```

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human          ACTGCTGGCCCTCTCCTGGTGCCGTTCACCCTCAACTTCACCATCACCAACCTGAAGTAC
rabbit         ------------------------------------------------------------

human          GAGGAGGACATGCATTGCCCTGGCTCCAGGAAGTTCAACACCACAGAGAGAGTCCTGCAG
rabbit         ------------------------------------------------------------

human          AGTCTGCTTGGTCCCATGTTCAAGAACACCAGTGTTGGCCCTCTGTACTCTGGCTGCAGA
rabbit         ------------------------------------------------------------

human          CTGACCTTGCTCAGGTCCGAGAAGGATGGAGCAGCCACTGGAGTGGATGCCATCTGCACC
rabbit         ------------------------------------------------------------

human          CACCGTCTTGACCCCAAAAGCCCTGGAGTGGACAGGGAGCAGCTATACTGGGAGCTGAGC
rabbit         ------------------------------------------------------------

human          CAGCTGACCAATGGCATCAAAGAGCTGGGTCCCTACACCCTGGACAGAAACAGTCTCTAT
rabbit         ------------------------------------------------------------

human          GTCAATGGTTTCACCCATCAGACCTCTGCGCCCAACACCAGCACTCCTGGGACCTCCACA
rabbit         ------------------------------------------------------------

human          GTGGACCTTGGGACCTCAGGGACTCCATCCTCCCTCCCCAGCCCTACATCTGCTGGCCCT
rabbit         ------------------------------------------------------------

human          CTCCTGGTGCCATTCACCCTCAACTTCACCATCACCAACCTGCAGTACGAGGAGGACATG
rabbit         ------------------------------------------------------------
```

```
human    CATCACCCAGGCTCCAGGAAGTTCAACACCACGGAGCGGGTCCTGCAGGGTCTGCTTGGT
rabbit   ------------------------------------------------------------

human    CCCATGTTCAAGAACACCAGTGTCGGCCTTCTGTACTCTGGCTGCAGACTGACCTTGCTC
rabbit   ------------------------------------------------------------

human    AGGCCTGAGAAGAATGGGGCAGCCACTGGAATGGATGCCATCTGCAGCCACCGTCTTGAC
rabbit   ------------------------------------------------------------

human    CCCAAAAGCCCTGGACTCAACAGAGAGCAGCTGTACTGGGAGCTGAGCCAGCTGACCCAT
rabbit   ------------------------------------------------------------

human    GGCATCAAAGAGCTGGGCCCCTACACCCTGGACAGGAACAGTCTCTATGTCAATGGTTTC
rabbit   ------------------------------------------------------------

human    ACCCATCGGAGCTCTGTGGCCCCCACCAGCACTCCTGGGACCTCCACAGTGGACCTTGGG
rabbit   ------------------------------------------------------------

human    ACCTCAGGGACTCCATCCTCCCTCCCCAGCCCCACAACAGCTGTTCCTCTCCTGGTGCCG
rabbit   ------------------------------------------------------------

human    TTCACCCTCAACTTTACCATCACCAATCTGCAGTATGGGGAGGACATGCGTCACCCTGGC
rabbit   ------------------------------------------------------------

human    TCCAGGAAGTTCAACACCACAGAGAGGGTCCTGCAGGGTCTGCTTGGTCCCTTGTTCAAG
rabbit   ------------------------------------------------------------
```

```
human           AACTCCAGTGTCGGCCCTCTGTACTCTGGCTGCAGACTGATCTCTCTCAGGTCTGAGAAG
rabbit          ------------------------------------------------------------

human           GATGGGGCAGCCACTGGAGTGGATGCCATCTGCACCCACCACCTTAACCCTCAAAGCCCT
rabbit          ------------------------------------------------------------

human           GGACTGGACAGGGAGCAGCTGTACTGGCAGCTGAGCCAGATGACCAATGGCATCAAAGAG
rabbit          ------------------------------------------------------------

human           CTGGGCCCCTACACCCTGGACCGGAACAGTCTCTACGTCAATGGTTTCACCCATCGGAGC
rabbit          ------------------------------------------------------------

human           TCTGGGCTCACCACCAGCACTCCTTGGACTTCCACAGTTGACCTTGGAACCTCAGGGACT
rabbit          ------------------------------------------------------------

human           CCATCCCCCGTCCCCAGCCCCACAACCACCGGCCCTCTCCTGGTGCCATTCACACTCAAC
rabbit          ------------------------------------------------------------

human           TTCACCATCACTAACCTACAGTATGAGGAGAACATGGGTCACCCTGGCTCCAGGAAGTTC
rabbit          ------------------------------------------------------------

human           AACATCACGGAGAGTGTTCTGCAGGGTCTGCTCAAGCCCTTGTTCAAGAGCACCAGTGTT
rabbit          ------------------------------------------------------------

human           GGCCCTCTGTATTCTGGCTGCAGACTGACCTTGCTCAGGCCTGAGAAGGATGGAGTAGCC
rabbit          ------------------------------------------------------------
```

```
human    ACCAGAGTGGACGCCATCTGCACCCACCGCCCTGACCCCAAAATCCCTGGGCTAGACAGA
rabbit   ------------------------------------------------------------

human    CAGCAGCTATACTGGGAGCTGAGCCAGCTGACCCACAGCATCACTGAGCTGGGACCCTAC
rabbit   ------------------------------------------------------------

human    ACCCTGGATAGGGACAGTCTCTATGTCAATGGTTTCACCCAGCGGAGCTCTGTGCCCACC
rabbit   ------------------------------------------------------------

human    ACCAGCACTCCTGGGACTTTCACAGTACAGCCGGAAACCTCTGAGACTCCATCATCCCTC
rabbit   ------------------------------------------------------------

human    CCTGGCCCCACAGCCACTGGCCCTGTCCTGCTGCCATTCACCCTCAATTTTACCATCACT
rabbit   ------------------------------------------------------------

human    AACCTGCAGTATGAGGAGGACATGCGTCGCCCTGGCTCCAGGAAGTTCAACACCACGGAG
rabbit   ------------------------------------------------------------

human    AGGGTCCTTCAGGGTCTGCTTATGCCCTTGTTCAAGAACACCAGTGTCAGCTCTCTGTAC
rabbit   ------------------------------------------------------------

human    TCTGGTTGCAGACTGACCTTGCTCAGGCCTGAGAAGGATGGGGCAGCCACCAGAGTGGAT
rabbit   ------------------------------------------------------------

human    GCTGTCTGCACCCATCGTCCTGACCCCAAAAGCCCTGGACTGGACAGAGAGCGGCTGTAC
rabbit   ------------------------------------------------------------
```

```
human    TGGAAGCTGAGCCAGCTGACCCACGGCATCACTGAGCTGGGCCCCTACACCCTGGACAGG
rabbit   ------------------------------------------------------------

human    CACAGTCTCTATGTCAATGGTTTCACCCATCAGAGCTCTATGACGACCACCAGAACTCCT
rabbit   ------------------------------------------------------------

human    GATACCTCCACAATGCACCTGGCAACCTCGAGAACTCCAGCCTCCCTGTCTGGACCCATG
rabbit   ------------------------------------------------------------

human    ACCGCCAGCCCTCTCCTGGTGCTATTCACAATTAACTTCACCATCACTAACCTGCGGTAT
rabbit   ------------------------------------------------------------

human    GAGGAGAACATGCATCACCCTGGCTCTAGAAAGTTTAACACCACGGAGAGAGTCCTTCAG
rabbit   ------------------------------------------------------------

human    GGTCTGCTCAGGCCTGTGTTCAAGAACACCAGTGTTGGCCCTCTGTACTCTGGCTGCAGA
rabbit   ------------------------------------------------------------

human    CTGACCTTGCTCAGGCCCAAGAAGGATGGGGCAGCCACCAAAGTGGATGCCATCTGCACC
rabbit   ------------------------------------------------------------

human    TACCGCCCTGATCCCAAAAGCCCTGGACTGGACAGAGAGCAGCTATACTGGGAGCTGAGC
rabbit   ------------------------------------------------------------

human    CAGCTGACCCACAGCATCACTGAGCTGGGCCCCTACACCCTGGACAGGGACAGTCTCTAT
rabbit   ------------------------------------------------------------
```

```
human          GTCAATGGTTTCACACAGCGGAGCTCTGTGCCCACCACTAGCATTCCTGGGACCCCCACA
rabbit         ------------------------------------------------------------

human          GTGGACCTGGGAACATCTGGGACTCCAGTTTCTAAACCTGGTCCCTCGGCTGCCAGCCCT
rabbit         ------------------------------------------------------------

human          CTCCTGGTGCTATTCACTCTCAACTTCACCATCACCAACCTGCGGTATGAGGAGAACATG
rabbit         ------------------------------------------------------------

human          CAGCACCCTGGCTCCAGGAAGTTCAACACCACGGAGAGGGTCCTTCAGGGCCTGCTCAGG
rabbit         ------------------------------------------------------------

human          TCCCTGTTCAAGAGCACCAGTGTTGGCCCTCTGTACTCTGGCTGCAGACTGACTTTGCTC
rabbit         ------------------------------------------------------------

human          AGGCCTGAAAAGGATGGGACAGCCACTGGAGTGGATGCCATCTGCACCCACCACCCTGAC
rabbit         ------------------------------------------------------------

human          CCCAAAAGCCCTAGGCTGGACAGAGAGCAGCTGTATTGGGAGCTGAGCCAGCTGACCCAC
rabbit         ------------------------------------------------------------

human          AATATCACTGAGCTGGGCCCCTATGCCCTGGACAACGACAGCCTCTTTGTCAATGGTTTC
rabbit         ------------------------------------------------------------

human          ACTCATCGGAGCTCTGTGTCCACCACCAGCACTCCTGGGACCCCCACAGTGTATCTGGGA
rabbit         ------------------------------------------------------------
```

```
human           GCATCTAAGACTCCAGCCTCGATATTTGGCCCTTCAGCTGCCAGCCATCTCCTGATACTA
rabbit          ------------------------------------------------------------

human           TTCACCCTCAACTTCACCATCACTAACCTGCGGTATGAGGAGAACATGTGGCCTGGCTCC
rabbit          ------------------------------------------------------------

human           AGGAAGTTCAACACTACAGAGAGGGTCCTTCAGGGCCTGCTAAGGCCCTTGTTCAAGAAC
rabbit          ------------------------------------------------------------

human           ACCAGTGTTGGCCCTCTGTACTCTGGCTGCAGGCTGACCTTGCTCAGGCCAGAGAAAGAT
rabbit          -CCAGTGTTGGCACCTTCTACACTGGCTGCAGCCTGGCCGCTCTCAGCCTTGAGAAGGGA
                 ********** *  * *** ********** *** **   ***** *  ***** *

human           GGGGAAGCCACCGGAGTGGATGCCATCTGCACCCACCGCCCTGACCCCACAGGCCCTGGG
rabbit          GGAGCAGCCACTGGTGTGAACTTTGTCTGCACTTTCCACTCTGACCCCTTAAACCCTGGA
                ** * ****** ** *** *     *******   ** * ********  *  ******

human           CTGGACAGAGAGCAGCTGTATTTGGAGCTGAGCCAGCTGACCCACAGCATCACTGAGCTG
rabbit          CTGCGCAGAGAGCAGCTGTACTGGGAGCTGAGCCGAGAGACCTATGGCATCACCCAGCTG
                ***  *************** * **********    **** *  *******  *****

human           GGCCCCTACACACTGGACAGGGACAGTCTCTATGTCAATGGTTTCACCCATCGGAGCTCT
rabbit          GGCTCCTTTGCCCTGGACAGGGACAGTCTCTATGTCAATGATTACACCTATGGAGCCATG
                *** ***   * ************************** ** **** ** *   *

human           GTACCCACCACCAGCACCGGGGTGGTCAGCGAGGAGCCATTCACACTGAACTTCACCATC
rabbit          GCCCCAACTACCAGCACTGATGAGGTCAGTGAGGAGCCCTTCACGCTGAACTTCACCATC
                *  ** ** ******** *  * ****** ******** ***** ***************

human           AACAACCTGCGCTACATGGCGGACATGGGCCAACCCGGCTCCCTCAAGTTCAACATCACA
rabbit          AACAACCTGCGCTACTCTGCCAACATGGGCCGCCCTGGCTCCCTCAAGTTCAACATCACA
                ***************   **  *********  ** ************************
```

```
human           GACAACGTCATGCAGCACCTGCTCAGTCCTTTGTTCCAGAGGAGCAGCCTGGGTGCACGG
rabbit          GACACCCTCATGCAGCACCTGCTCAGCCCCTTGTTCCAGAGGAGCAGTCTGGGTGCCCGA
                **** * ********************** ** ****************** ******** **

human           TACACAGGCTGCAGGGTCATCGCACTAAGGTCTGTGAAGAACGGTGCTGAGACACGGGTG
rabbit          TATGCTGGCTGCAGGGTCATCATGCTAAGGTCTGTGAAGAACCATGCCCATACACAGGTG
                **  * ***************   ******************  ***  * **** ****

human           GACCTCCTCTGCACCTACCTGCAGCCCCTCAGCGGCCCAGGTCTGCCTATCAAGCAGGTG
rabbit          GACATCCTGTGTACCTACCGCTGGCCCCCTGGCAGCCCGCGGTTGTCTGCCAAGCGCGTG
                *** **** ** *******    *****   ** ****  *  ** **  *****  ***

human           TTCCATGAGCTGAGCCAGCAGACCCATGGCATCACCCGGCTGGGCCCCTACTCTCTGGAC
rabbit          TTCCATGAGCTGAGCTGGCAGACCCGAGGCATCACCCAGCTGGGCCCTTACTTCCTGGAC
                ***************  ********  ********** ********* ****  ******

human           AAAGACAGCCTCTACCTTAACGGTTACAATGAACCTGGTCCAGATGAGCCTCCTACAACT
rabbit          AAAGACAGCCTGCACATCGACGGTTACAATGAACGTGGGCCAGATGAGCCTCCTACAACT
                ***********  ** *  ************** *** **********************

human           CCCAAGCCAGCCACCACATTCCTGCCTCCTCTGTCA----------------GAAGCCACA
rabbit          CCTGAGCCAGCCACTGCATTACCGACTTCTCCATCAACATCTGTGTGGCCAGAAGCCACC
                **  **********  **** * * * ** ***  ***               ********

human           ACAGCCATGGGGTACCACCTGAAGACCCTCACACTCAACTTCACCATCTCCAATCTCCAG
rabbit          ACAGCCACAGGGCACACCCTGAAGACCTTCACACTCAACTTCACCATCTCCAACCTCCAC
                *******  *** **  ********** ************************* *****

human           TATTCACCAGATATGGGCAAGGGCTCAGCTACATTCAACTCCACCGAGGGGGTCCTTCAG
rabbit          TATTCACCAGACATGGGCAACGGGTCAGCCACACTCAACTCCACTGAGCGGACCCTGCTG
                *********** ******** ** ***** *** ********** *** **  *** * *

human           CACCTGCTCAGACCCTTGTTCCAGAAGAGCAGCATGGGCCCCTTCTACTTGGGTTGCCAA
rabbit          TATCTGCTCGGATCCATGTTCCAGAACAGCAGCCTGGGTCCCTCCTACTCAGGCTGCAGA
                 * ****** ** ** ********** ****** **** **** *****  ** ***  *
```

```
human           CTGATCTCCCTCAGGCCTGAGAAGGATGGGGCAGCCACTGGTGTGGACACCACCTGCACC
rabbit          CTGACCTCTCTCAGGTCTGAGCAGGACAGGGTGGGCACTAGCGTGGATGTCATCTGCACC
                **** *** ****** ***** ****  ***  * **** * *****   ** *******

human           TACCACCCTGACCCTGTGGGCCCCGGGCTGGACATACAGCAGCTTTACTGGGAGCTGAGT
rabbit          TATCGCCCTGACCCCACGCACCTGGTGCTGGATGTGCAGCAGCTGTATGGAGAGCTGAGC
                ** * *********   *  **  * ******  * ******** **  * ********

human           CAGCTGACCCATGGTGTCACCCAACTGGGCTTCTATGTCCTGGACAGGGATAGCCTCTTC
rabbit          CAGCTGACCCATGGTGTCACCCAGTTGGGCCTGTACAGCTTGGACAAGGACAGCCTATTT
                **********************  ***** * **   * ****** *** ***** **

human           ATCAATGGCTATGCACCCCAGAATTTATCA---ATCCGGGGCGAGTACCAGATAAATTTC
rabbit          GTCAATGGCTATGCACCCCAGCACGTGGCACCCATCTGGAGCGAGTACCAGCTTGATTTC
                 ********************* *  *  **   *** ** ********** *  *****

human           CACATTGTCAACTGGAACCTCAGTAATCCAGACCCCACATCCTCAGAGTACATCACCCTG
rabbit          CACATAATCAACTGGAACCTCAGCAAGGCAGATCCCAGCTCTGTGGAGTACCTTGCTCTG
                *****  ***************** **  **** ****  **    ****** *  * ***

human           CTGAGGGACATCCAGGACAAGGTCACCACACTCTACAAAGGCAGTCAACTACATGACACA
rabbit          ATGACGGACATCCAGGACAAGGTCACCAGACTCTACACAGGGAGTCAACTACGAGACGTG
                 *** ********************** ******** *** **********  ***

human           TTCCGCTTCTGCCTGGTCACCAACTTGACGATGGACTCCGTGTTGGTCACTGTCAAGGCA
rabbit          TTCAACTCATGCCTAGTCACCAACTTAACGTCGGGCTCTCTGTTGGTCACTATGAAAGCA
                ***  **  ***** ********** ***  ** ***  ********** * ** ***

human           TTGTTCTCCTCCAATTTGGACCCCAGCCTGGTGGAGCAAGTCTTTCTAGATAAGACCCTG
rabbit          CTGTTCTCCTCCAATCTGGACCCCAACCTGGTGAAGCAAGTTTTTCTAGAAAAGACCTCG
                 ************** ********* ******* ******* ******** ******  *

human           AATGCCTCATTCCATTGGCTGGGCTCCACCTACCAGTTGGTGGACATCCATGTGACAGAA
rabbit          AATGCCTCATCCTACTGGCTGGGCGCCACCTACCAGTTGATGGATCTGCATGTGACAGAA
                ********** * * ********* ************** ****  * ***********
```

```
human           ATGGAGTCATCAGTTTATC----------AACCAACAAGCAGCTCCAGCACCCAGCAC
rabbit          GTGAGGCCAGCAGTTCATCTACCTACAGAAAAACCAACAAGAAGTCCCAGTTCCCAGCAA
                 **  * ** ***** ***           ********** **  ****  *******

human           TTCTACCTGAATTTCACCATCACCAACCTACCATATTCCCAGGACAAAGCCCAGCCAGGC
rabbit          TTCCAGCTGAATTTCACCATCACCAACCTGTTCTACTCCCAAGACATAGCCCAGGAAGGC
                *** * ************************    ** ***** **** *******  ****

human           ACCACCAATTACCAGAGGAACAAAAGGAATATTGAGGATGCGCTCAACCAACTCTTCCGA
rabbit          AGTGCCAAATACCAGTGGAACAAAAGAAGTATTGAGGACGCGCTCAACCAGCTCTTCCAA
                *   **** ****** ********** * ********* ********** ******* *

human           AACAGCAGCATCAAGAGTTATTTTTCTGACTGTCAAGTTTCAACATTCAGGTCTGTCCCC
rabbit          AACAGCAGCGTCAAGAGTTACTTTTCCGAATGTCAAGTTGTAGCATTCCGGTCTGTCCCC
                ********* ********** ***** ** *********  * ***** ***********

human           AACAGGCACCACACCGGGGTGGACTCCCTGTGTAACTTCTCGCCACTGGCTCGGAGAGTA
rabbit          GACAGCGACCATACCAAAGTGGACTCCTTGTGTGGCTTCTCATCTTTGGCTCGGAGACTG
                 ****  **** ***   ********* *****  ******  *  ********** *

human           GACAGAGTTGCCATCTATGAGGAATTTCTGCGGATGACCCGGAATGGTACCCAGCTGCAG
rabbit          GACAGAGTCATTATCTATGAGGAGTTTGTGCAGATGACCAAGAATGGTACTCAGTTGCAG
                ********    ********** *** *** *******  ********* *** *****

human           AACTTCACCCTGGACAGGAGCAGTGTCCTTGTGGATGGGTATTCTCCCAACAGAAATGAG
rabbit          AACTTCACCCTGGACAGGGACAGCATTCTTGTGGACGGGTATTCTCCAAGCAGAAATGAT
                ******************  ***  * ******** ********** * *********

human           CCCTTAACTGGGAATTCTGACCTTCCCTTCTGGGCTGTCATCCTCATCGGCTTGGCAGGA
rabbit          GCTGTGATTAGGAATTCAGACCTTCCCTTCTGGGCCATCATCCTCATCTGCCTGGCTGCA
                 *  * * * ******* ******************  ********** ** **** * *

human           CTCCTGGGAGTCATCACATGCCTGATCTGCGGTGTCCTGGTGACCACCCGCCGGCGGAAG
rabbit          TTCCTGGGACTCATCACGTGCCTGGTCTGCTGCTTTCTGGTGGCCACCCGCCTGCGGAGG
                 ******** ******* ****** ***** *  * ****** ********* ***** *
```

```
human           AAGGAAGGAGAATACAACGTCCAGCAACAGTGCCCAGGCTACTACCAGTCACACCTAGAC
rabbit          AAGGAGGGAGACTACGAGGTCCAACGCCGCCGCCTGGGCTACTATCTGCCACAGCTGGAC
                ***** ***** *** * ***** *  *   ***  ******** * * **** ** ***

human           CTGGAGGATCTGCAATGA---CTGGAACTTGCCGG---TGCCTGGGGTGCCTTTCCCCCA
rabbit          CTGACGAAGCTGCAGTAATTCCTGGAACCACAGGAGCTTGGCTGGAGCAGAAATAAACCA
                ***  * * ***** * *   *******    *    ** **** *     *   ***

human           GCCAGGGTCCAAAGAAGCTT--GGCTGGGGCAGAAATAAACCAT-ATTGGTCGGA-----
rabbit          CACTGGTGCGACACAGCCTCTGGGCCTTTCTTGACTTGGCCCCTGACTGGCTTGCAGAGA
                  * **  * * * *  **   ***      **  *   ** * * ***   *

human           ------------------------------------------------------------
rabbit          CTACGAGGAAAGTTGGAAAGCCTTCCTTCCTTACTAAGCCCTGAAGTCAACTATCAGTTG

human           ------------------------------------------------------------
rabbit          TGTTTTATGGTTTCACACCATGTCACCCTTCAGGGATGCCAGGATTGCCATCACATAAAA

human           ------------------------------------------------------------
rabbit          TCAACATCCCACTTCACCATGAGGTTTTCCCTCCTGTTCACCCACTGTATACCTGCTATT

human           ------------------------------------------------------------
rabbit          CTCCCCATCACACCTATGTCTGCTCCTCCCCATTTCCCTACTTCCTGTAGTCCCCGTAGT

human           ------------------------------------------------------------
rabbit          CTTGAGTTTGTCTTCCTTCATTCTCTGAAGCTCAGGTTCACCAGGATTTCTGGATCAGTT

human           ------------------------------------------------------------
rabbit          TTCCTGGATGTCTCCTTACCCACCCCCATGGATTCTCCAAGATGAAAAACAGACCAAGAA
```

```
human           ------------------------------------------------------------
rabbit          GTGGCTCAAAAATGGCTCTGTAATCAGCTTTGGGACTGGAGAGCTGAAATGAAGAGAGGC

human           ------------------------------------------------------------
rabbit          ATTTAGGAAGCCAAGTAATATCAAGATTCTAGAAGCATAATGTCTGCTTTGGATATAAAG

human           ------------
rabbit          ATGAATAAAAGT
```

Underline fields are primer sequences we used.

**Supplemental Information 5.**

CLUSTAL 2.1 multiple sequence alignment

**Galectin 3**

```
human           GAGTATTTGAGGCTCGGAGCCACCGCCCCGCCGGCGCCCGCAGCACCTCCTCGCCAGCAG
rabbit          ------------------------------------------------------------


human           CCGTCCGGAGCCAGCCAACGAGCGGAAAATGGCAGACAATTTTTCGCTCCATGATGCGTT
rabbit          ----------------------AGGAAAATGGCGGATGGTTTTTCGCTCAACGATGCCCT
                                       ********** **   ********** * *****  *

human           ATCTGGGTCTGGAAACCCAAACCCTCAAGGATGGCCTGGCGCATGGGGGAACCAGCCTGC
rabbit          ATCTGGGTCTGGACACCCCCCAAACCAAGGATGGCCTGGCCCATGGGGGAACCAGCCTGC
                ************* ****       *************** ******************

human           TGGGGCAGGGGGCTACCCAGGGGCTTCCTATCCTGGGGCCTACCCCGGGCAGGCACCCCC
rabbit          TGGGCCAGGGGGCTACCCAGGGGCAGCCTATCCTGGGGCCTACCCTGGACATGCACCT--
                **** ********************  ******************** ** ** *****

human           AGGGGCTTATCCTGGACAGGCACCTCCAGGCGCCTACCCTGGAGCACCTGGAGCTTATCC
rabbit          -GGAGCTTATCCCGGGCAAGCGCCTCCTGGCCCCTACCCTGG-----------------CC
                 ** ******** ** ** ** ***** *** **********                **

human           CGGAGCACCTGCACCTGGAGTCTACCCAGGGCCACCCAGCGGCCCTGGGGCCTACCCATC
rabbit          CAGGA-----GCACATGGAGCCTACCCTGGGCAGCCAGGTGGTCCTGGGGCCTACCCGTC
                * *       **** ***** ****** ****  **  * ** ************** **

human           TTCTGGACAGCCAAGTGCCACCGGAGCCTACCCTGCCACTGGCCCCTATGGCGCCCCTGC
rabbit          TCCTGGACAGCCAAGTGGTGCTGGAGCTTACCCTGGCGCCAGCCCTTACAGCGCCTCTGC
                * ***************   * ***** ******* * *  **** **  ***** ****

human           TGGGCCACTGATTGTGCCTTATAACCTGCCTTTGCCTGGGGGAGTGGTGCCTCGCATGCT
rabbit          TGGACCACTGCCTGTGCCTTATGACCTGCCTCTGCCTGGAGGAGTCATGCCCCGCATGCT
```

```
                *** ******  ********** ******* ******* *****  **** ********

human           GATAACAATTCTGGGCACGGTGAAGCCCAATGCAAACAGAATTGCTTTAGATTTCCAAAG
rabbit          GATAACGATTGTGGGCACGGTGAAGCCCAATGCAAACAGACTCGCTTTGGATTTCAAGAG
                ****** *** **************************** * ***** ****** * * **

human           AGGGAATGATGTTGCCTTCCACTTTAACCCACGCTTCAATGAGAACAACAGGAGAGTCAT
rabbit          AGGGAATGACGTTGCCTTCCACTTTAACCCCCGCTTCAATGAGAACAACAGGAGAGTCAT
                ********* ******************** ******************************

human           TGTTTGCAATACAAAGCTGGATAATAACTGGGGAAGGGAAGAAAGACAGTCGGTTTTCCC
rabbit          TGTCTGCAACACAAAGGTGGATAACAACTGGGGAAGGGAAGAAAGGCAGACGACTTTCCC
                *** ***** ****** ******* ******************** *** **  ******

human           ATTTGAAAGTGGGAAACCATTCAAAATACAAGTACTGGTTGAACCTGACCACTTCAAGGT
rabbit          ATTTGAAATTGGTAAACCATTCAAAATACAAGTCCTGGTGGAGCCAGACCACTTCAAGGT
                ******** *** ******************** ***** ** ** **************

human           TGCAGTGAATGATGCTCACTTGTTGCAGTACAATCATCGGGTTAAAAAACTCAATGAAAT
rabbit          TGCGGTCAATGATGCCCACTTGTTGCAGTACAATCATCGCATGAGAAACCTCAAGGAAAT
                *** ** ******** ***********************  * * *** ***** *****

human           CAGCAAACTGGGAATTTCTGGTGACATAGACCTCACCAGTGCTTCATATACCATGATATA
rabbit          CAACAAGCTGGGAATTTCTGGTGACATACAACTCACCAGTGCTTCACATGCTATGATATA
                ** *** ********************** * *************** ** * ********

human           ATCTGAAAGGGGCAGATTAAAAAAAAAAAAAAGAATCTAAACCTTACATGTGTAAAGGTTT
rabbit          A------------------------------------------------------------
                *

human           CATGTTCACTGTGAGTGAAAATTTTTACATTCATCAATATCCCTCTTGTAAGTCATCTAC
rabbit          ------------------------------------------------------------


human           TTAATAAATATTACAGTGAATTACCTGTCTCAATATGTCAAAAAAAAAAAAAAAAAA
rabbit          ----------------------------------------------------------
```

Underline fields are primer sequences we used.