Elementos de um alinhamento



- Utilizados para atribuir pontuação para seu alinhamento. E.g:
 - Gap opening: -4 pontos
 - Gap extension: -2 pontos

Total:

- Match: +1 ponto
- Mismatch: -2 pontos

Matrizes de substituição



• Utilizadas para atribuir a pontuação a um alinhamento. E.g:

	А	С	G	Т
А	1	-2	-2	-2
С	-2	1	-2	-2
G	-2	-2	1	-2
T	-2	-2	-2	1

<pre># Matrix made by matblas from blosum45.iij # * column uses minimum score # BLOSUM Clustered Scoring Matrix in 1/3 Bit Units # Blocks Database = /data/blocks_5.0/blocks.dat # Cluster Percentage: >= 45 # Entropy = 0.3795, Expected = -0.2789</pre>
A R N D C Q E G H I L K M F P S T W Y V B Z X * A 5 -2 -1 -2 -1 -1 -1 0 -2 -1 -1 -1 -1 -2 -1 1 0 -2 -2 0 -1 -1 0 -5 R -2 7 0 -1 -3 1 0 -2 0 -3 -2 3 -1 -2 -2 -1 1 0 -2 -1 -1 0 -1 -5 N -1 0 6 2 -2 0 0 0 0 1 -2 -3 0 -2 -2 -2 1 0 -4 -2 -3 4 0 -1 -5 D -2 -1 2 7 -3 0 2 -1 0 -4 -3 0 -3 -4 -1 0 -1 -4 -2 -3 5 1 -1 -5 C -1 -3 -2 -3 12 -3 -3 -3 -3 -3 -3 -2 -3 -2 -2 -4 -1 -1 -5 -3 -1 -2 -3 -2 -5 Q -1 1 0 0 -3 6 2 -2 1 1 -2 -2 1 0 -4 -1 0 -1 -2 -1 -3 0 4 -1 -5 E -1 0 0 2 -3 2 6 -2 0 -3 -2 1 0 -4 -3 0 -2 -2 -2 -3 -3 0 0 -1 -3 -2 -3 1 4 -1 -5 G 0 -2 0 -1 -3 -2 -2 7 -2 -4 -3 -2 -2 -3 -2 0 0 0 -1 -3 -2 -3 1 4 -1 -5 H -2 0 1 0 -3 1 0 0 -2 10 -3 -2 -1 0 0 -2 -2 -1 -2 -3 2 0 0 -1 -5 L -1 -2 -3 -3 -2 -2 3 -4 -3 5 2 -3 2 0 0 -2 -2 -1 -2 0 3 -3 -3 -1 -5 L -1 -2 -3 -3 -2 -2 -2 2 5 -3 2 0 0 -2 -2 -1 -2 0 3 -3 -3 -1 -5 K -1 3 0 0 -3 1 1 -2 -1 -3 -3 5 5 -1 -3 -1 -1 -1 -2 -1 -2 0 1 -3 -2 -1 -5 K -1 3 0 0 -3 1 1 -2 -1 -3 -3 5 5 -1 -3 -1 -1 -1 -2 -1 -5 M -1 -1 -2 -3 -3 -2 0 -2 -2 0 2 2 -1 6 0 0 -2 -2 -1 -2 0 1 -3 -2 -1 -5 K -1 3 0 0 -3 1 1 -2 -1 -3 -3 5 -1 -3 -1 -1 -1 -2 -1 -2 0 1 -3 -3 -1 -5 F -2 -2 -2 -4 4 -2 -4 -3 -3 -2 0 1 -3 0 8 -3 -2 -1 1 3 0 -3 -3 -1 -5 S 1 -1 1 0 -1 0 0 0 0 -1 -2 -3 -1 -2 -2 -1 4 2 4 -2 -1 0 0 0 -5 T 0 -1 0 -1 -1 -1 -1 -1 -2 -2 -2 -1 -1 -1 -1 -1 -1 -2 -2 -3 -3 -1 -5 V 0 -2 -3 -3 -3 -1 -2 -3 -3 -3 -3 -3 -3 -3 -3 -3 -3 -3 -3 -3

```
-2
                                                      -2
                                                           -1
                                                           -2
Ser 1 -1 1 0 -1 0 0 0 -1 -2 -2 0 -1 -2 -1 4
          0 -1 -1 -1 -2 -2 -1 -1 -1 -2 -1 1 5
Trp -3 -3 -4 -4 -2 -2 -3 -2 -3 -2 -3 -1 1 -4 -3 -2 11
Tyr -2 -2 -2 -3 -2 -1 -2 -3 2 -1 -1 -2 -1 3 -3 -2 -2 2 7
Val 0 -3 -3 -1 -2 -2 -3 -3 3 1 -2 1 -1 -2 -2 0 -3 -1 4
   Ala Arg Asn Asp Cys Gln Glu Gly His Ile Leu Lys Met Phe Pro Ser Thr Trp Tyr Val
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