

Local pairwise alignment - one optimal alignment

	-	S	O	I	L	E	D
-	0	0	0	0	0	0	0
S	0	2	1	0	0	0	0
I	0	1	1	3	2	1	0
L	0	0	0	2	5	4	3
L	0	0	0	1	4	4	3
Y	0	0	0	0	3	3	3

S	O	I	L
2	-1	2	2
S	-	I	L

5

p(x,x)	2
p(x,y)	-1
g	-1

Local pairwise alignment

	-	M	I	S	S	I	S	S	I	P	P	I
-	0	0	0	0	0	0	0	0	0	0	0	0
K	0	0	0	0	0	0	0	0	0	0	0	0
I	0	0	2	1	0	2	1	0	2	1	0	2
S	0	0	1	4	3	2	4	3	2	1	0	1
S	0	0	0	3	6	5	4	6	5	4	3	2
E	0	0	0	2	5	5	4	5	5	4	3	2
D	0	0	0	1	4	4	4	4	4	4	3	2

p(x,x)	2
p(x,y)	-1
g	-1

Local pairwise alignment - two optimal alignments

	-	M	I	S	S	I	S	S	I	P	P	I
-	0	0	0	0	0	0	0	0	0	0	0	0
K	0	0	0	0	0	0	0	0	0	0	0	0
I	0	0	2	1	0	2	1	0	2	1	0	2
S	0	0	1	4	3	2	4	3	2	1	0	1
S	0	0	0	3	6	5	4	6	5	4	3	2
E	0	0	0	2	5	5	4	5	5	4	3	2
D	0	0	0	1	4	4	4	4	4	4	3	2

I	S	S
2	2	2
I	S	S

6

p(x,x) 2  
p(x,y) -1  
g -1

Local pairwise alignment

	-	M	I	S	S	I	S	S	I	P	P	I
-	0	0	0	0	0	0	0	0	0	0	0	0
S	0	0	0	2	2	1	2	2	1	0	0	0
I	0	0	2	1	1	4	3	2	4	3	2	2
P	0	0	1	1	0	3	3	2	3	6	5	4
S	0	0	0	3	3	2	5	5	4	5	5	4

p(x,x) 2  
p(x,y) -1  
g -1

Local pairwise alignment - one optimal alignment

	-	M	I	S	S	I	S	S	I	P	P	I
-	0	0	0	0	0	0	0	0	0	0	0	0
S	0	0	0	2	2	1	2	2	1	0	0	0
I	0	0	2	1	1	4	3	2	4	3	2	2
P	0	0	1	1	0	3	3	2	3	6	5	4
S	0	0	0	3	3	2	5	5	4	5	5	4

S	I	P
2	2	2
S	I	P

6

p(x,x) 2  
p(x,y) -1  
g -1

Local pairwise alignment - non-overlapping suboptimal alignments w/ score 5

	-	M	I	S	S	I	S	S	I	P	P	I
-	0	0	0	0	0	0	0	0	0	0	0	0
S	0	0	0	2	2	1	2	0	0	0	0	0
I	0	0	2	1	1	4	3	2	0	0	0	2
P	0	0	1	1	0	3	3	2	1	0	2	1
S	0	0	0	3	3	2	5	5	4	3	2	1

p(x,x) 2  
p(x,y) -1  
g -1

S	I	S	S
2	2	-1	2
S	I	P	S

5

S	I	-	S
2	2	-1	2
S	I	P	S

5