

GRIMM - Genome rearrangement algorithms

Source genome:

Multiple genome form

1231845610310210110099989796959493929190212223248079787775747372717069686766656463425241625958575456555048474660614544514043495339383736353476333231302928272625

Destination genome:

-48-50-55-56-54-57-58-59-62-41-52-42-63-64-65-66-67-68-69-70-71-72-73-74-75-77-78-79-8081828384858687-888920191716151413-1211109105104781061231845610310210110099989796

Chromosomes:

☒circular

☐linear (directed)

☐multichromosomal or undirected

☒signed

☐unsigned

run

undo

clear form

Or,

choose sample data

Formatting options

Report Style:

One line per genome (chromosomes concatenated)

One column (chromosomes separated)

Two column before & after (chromosomes separated)

☒Horizontal

☐Vertical

☐Yes

☐Show all chromosomes

☐Only affected chromosomes

Show all possible initial steps of optimal scenarios

☐

Highlighting style:

Should operations (reversal, translocation, fission, fusion) be highlighted, and when?

☐before

☐after

☒between/both

☐no highlighting

Chromosome end format:

☐numeric (10)

☒subscripts (C₁₀)

☐omit

Color coding:

Genes should be colored according to their chromosome in which genome:

☐source

☒destination

run

undo

clear form

[Click here or scroll up to enter new data or change options.](#)

106 genes Reversal Distance: 3

One optimal reversal scenario

Step	Description	
0	(Source)	123184561031021011009998979695949392919021222324807978777574737271706968676665646342524162595857545655504847466061454451404349533938373635347633323130292827262581828384858687888920191716151413121110910510478106
1	Reversal	123184561031021011009998979695949392919021222324807978777574737271706968676665646342524162595857545655504847466061454451404349533938373635347633323130292827262581828384858687-888920191716151413121110910510478106
2	Reversal	123184561031021011009998979695949392919021222324807978777574737271706968676665646342524162595857545655504847466061454451404349533938373635347633323130292827262581828384858687-888920191716151413-121110910510478106
3	Reversal (Destination)	123184561031021011009998979695949392919021222324-25-26-27-28-29-30-31-32-33-76-34-35-36-37-38-39-53-49-43-40-51-44-45-61-60-46-47-48-50-55-56-54-57-58-59-62-41-52-42-63-64-65-66-67-68-69-70-71-72-73-74-75-77-78-79-8081828384858687-888920191716151413-121110910510478106

GRIMM 2.01 by Glenn Tesler, University of California, San Diego.
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MGR 1.36 by Guillaume Bourque (now moved to McGill).
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Contains code from [Phylip](#) 3.5, Copyright © 1986-1995 by Joseph Felsenstein and the University of Washington.

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