

Resource Summary Report

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Isofinder: Isochore Computational Prediction

RRID:SCR_008342

Type: Tool

Proper Citation

Isofinder: Isochore Computational Prediction (RRID:SCR_008342)

Resource Information

URL: <http://bioinfo2.ugr.es/IsoF/isofinder.html>

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Description: Isofinder is an algorithm running on the web able to predict isochores at the sequence level. Isochores are long genome segments homogeneous in G+C. The algorithm works by moving a sliding pointer from left to right along the DNA sequence and computing the mean G+C values to the left and to the right of the pointer at each point. Additionally, the program checks whether this significance exceeds a probability threshold. If so, the sequence is cut at this point into two subsequences; otherwise, the sequence remains undivided. The procedure continues recursively for each of the two resulting subsequences created by each cut. This leads to the decomposition of a chromosome sequence into long homogeneous genome regions (LHGRs) with well-defined mean G+C contents, each significantly different from the G+C contents of the adjacent LHGRs. Most LHGRs can be identified with Bernardi's isochores, given their correlation with biological features such as gene density, SINE and LINE (short, long interspersed repetitive elements) densities, recombination rate or single nucleotide polymorphism variability. The resulting isochore maps are available at <http://bioinfo2.ugr.es/isochores/>, and also at the UCSC Genome Browser (<http://genome.cse.ucsc.edu/>). Sponsors: Isofinder is funded by Universidad de Granada, Spain.

Synonyms: Isofinder

Resource Type: production service resource, data analysis service, service resource, analysis service resource

Keywords: algorithm, chromosome, dna, genome, heterogeneous, homogeneous, isochore, segment, sequence, single nucleotide polymorphism, snp, statistic

Funding:

Resource Name: Isofinder: Isochore Computational Prediction

Resource ID: SCR_008342

Alternate IDs: nif-0000-25208

Record Creation Time: 20220129T080246+0000

Record Last Update: 20250519T204759+0000

Ratings and Alerts

No rating or validation information has been found for Isofinder: Isochore Computational Prediction.

No alerts have been found for Isofinder: Isochore Computational Prediction.

Data and Source Information

Source: [SciCrunch Registry](#)

Usage and Citation Metrics

We have not found any literature mentions for this resource.