

Bionano Label Density Calculator User Guide

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Revision History

Revision A

Notes Initial release of document.

Bionano Label Density Calculator

This document describes the v1.0 release of Bionano Label Density Calculator. In this document we will provide an overview of what is changing with this release so that you may better understand the impact of moving to this version of our software. Should you have any questions please contact <u>support@bionanogenomics.com</u>.

Introduction

The Bionano Label Density Calculator predicts the expected label density from sequence FASTA files.

Prerequisites

- This tool is designed to run on Windows
- Before installing this tool you must have Perl installed.

Installation

To install the Bionano Label Density Calculator download and run the install file which can be found <u>here</u>. The installation will require approximately 130MB of disk space. When you click the link it will download the installation file. Run the executable and it will install the Bionano Label Density Calculator and open it for use. The installer will also add the Bionano Label Density Calculator program to your Windows start menu. To remove the Bionano Label Density Calculator go to Add / Remove Programs from your Windows start menu and choose to uninstall the Bionano Label Density Calculator.

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Instructions

After installation to use the Bionano Label Density Calculator follow these steps.

1.) Select the Label Density Calculator from your start menu. You should see this:

Label Density Calcula	tor		ł	Dionanc
Senome name	Geno	ome info	rmation	
Sequence file	Genome name Sequence source			
Select enzymes			No genome information	
	Total sequence size (kbp)		-	
Custom recognition enzyme sequences	Number	of contigs		
Add a sequence	Enzyme	Site density (Sites/100kbp)	Saphyr label density (Labels/100kbp)	Irys label density (Labels/100kbp)
Calculate		No density computed		
		Copy	Save	Print

2.) Select the FASTA file you want to test.

Label Density Calculat	or		ł	Dionanc
Genome name MyTest	Geno	ome info	rmation	
Sequence file ba38 yuanyuan fa	Genome name Sequence source Total sequence size (kbp)			
Select			No genome information	
Select existing enzyme				
Custom recognition enzyme sequences	Number	of contigs		
Add a sequence	Enzyme	Site density (Sites/100kbp)	Saphyr label density (Labels/100kbp)	Irys label density (Labels/100kbp)
Calculate	No density computed			
		Copy	Save	Print



3.) Select the enzyme(s) you want to use or enter a custom enzyme sequence. You can select more than one enzyme.

Label Density Calculato	r		ł	Dionou
Genome name	Genc	ome info	rmation	
Sequence file hg38_yuanyuan.fa	Genome name			
Select enzymes	Total segu	ence size (khn)	No genome	information
Select existing enzyme	Number o	of contigs		
Boml BsrDl	Enzyme	Site density (Sites/100kbp)	Saphyr label density (Labels/100kbp)	Irys label density (Labels/100kbp)
BosSI			No density computed	
DLE1		Сору	Save	Print

4.) Click the Calculate button. It may take a few minutes to generate results depending on the size of your input FASTA file. When it is done it will look like this. You will get density values for each enzyme selected. You can click the red 'Cancel' button after you have launched a calculation if you want to cancel the operation.

Label Density Calculate	or			bioñööö
Genome name MyTest	Geno	ome info	ormation	
Sequence file hg38_yuanyuan.fa	Genome name		Mylest	
Select enzymes	Sequence source		C:\Users\sway\Downloads\hg38_yuanyuan.fa	
DLET O Select existing enzyme	Total seq	uence size (kbp)	3209286.105	
Custom recognition enzyme sequences	Number	of contigs	455	
Add a sequence	Enzyme	Site density (Sites/100kbp)	Saphyr label density (Labels/100kbp)	Irys label density (Labels/100kbp)
Calculate	DLE1	20.7	16.7	14.9
		Conv	Save	Print



Technical Assistance

For technical assistance, contact Bionano Genomics Technical Support.

You can retrieve documentation on Bionano products, SDS's, certificates of analysis, frequently asked questions, and other related documents from the Support website or by request through e-mail and telephone.

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