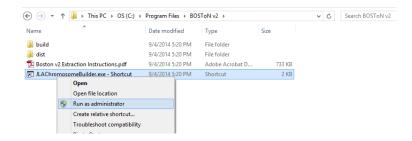
1. Right click on JLAChromosomeBuilder in C:\Program Files\BOSToN v2 (note: if file has not been extracted in C:\Program Files, errors will occur. Please re-extract into C:\Program Files if BOSToN v2 was extracted elsewhere). Select "Run as Administrator".

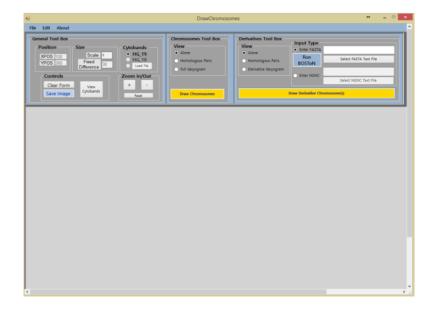


Note: if first time using the JLAChromosomeBuilder, a protection error may occur. If this happens click on allow/accept/More info/Run Anway to proceed

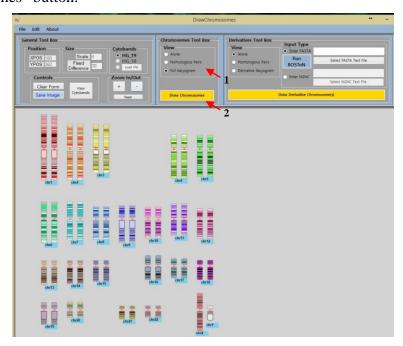


Windows 8 protection error

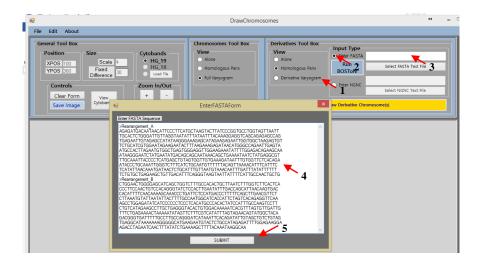
2. This will launch the JLAChromosomeBuilder GUI.



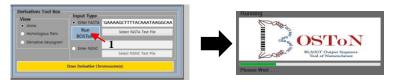
3. To draw normal chromosomes, select radio button for drawing option (either "Alone", "Homologous Pairs" or "Full Karyotype") in the "View" section of the "Chromosome Tool Box" and then click on the "Draw Chromosomes" button.



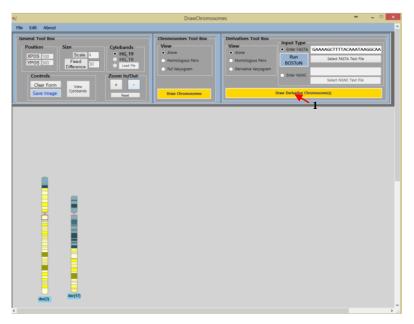
4. To draw derivative rearrangements from FASTA sequences, select radio button for drawing option in "View" section of the "Derivatives Tool Box", then click on "Enter FASTA" radio button and click on the open text field. Enter FASTA formatted sequences in the popup box and hit the "submit" button. Your FASTA file is now loaded.



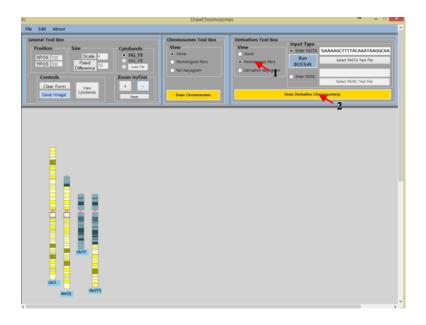
5. Hit the "Run BOSToN" button to generate the Next Generation Cytogenetic Nomenclature (NGCN). Your NGCN (Note: this is currently misspelled in the program) should now be loaded.



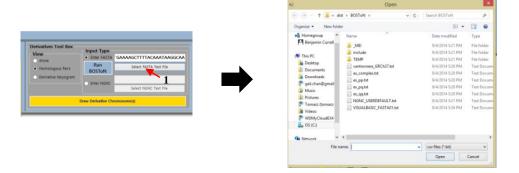
6. If chromosomes do not load automatically, click on the "Draw Derivative Chromosome(s)" button to view your derivative chromosomes.



7. If you want to change your view of the chromosomes, select radio button for your desired drawing option in "View" section of the "Derivatives Tool Box" and click on the "Draw Derivative Chromosome(s)" button.



8. If you have FASTA files in .txt format, you can load these type of files by clicking on the "Select FASTA Text File" to open a browser. After loading your .txt file, follow steps 5 and 6 to view your chromosome. Note: some example .txt files have been included (*i.e.*, ex_pp, ex_pq, ex_qq and ex_complex).



9. You can also load NGCN directly by clicking on the NGCN radio button and using either the open text field or the browser and then clicking on the "Draw Derivative Chromosome(s)" button.

