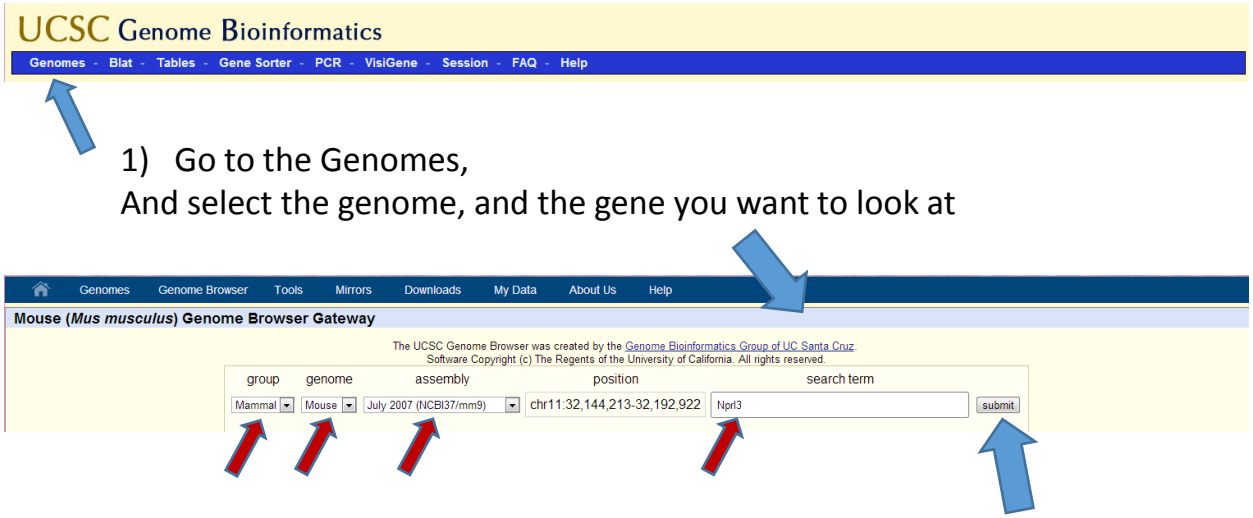
Generating oligo coordinate file for captureC analyser

Tutorial written by Jelena Telenius – 22May2015

We have our own UCSC server – here
https://genome.molbiol.ox.ac.uk/

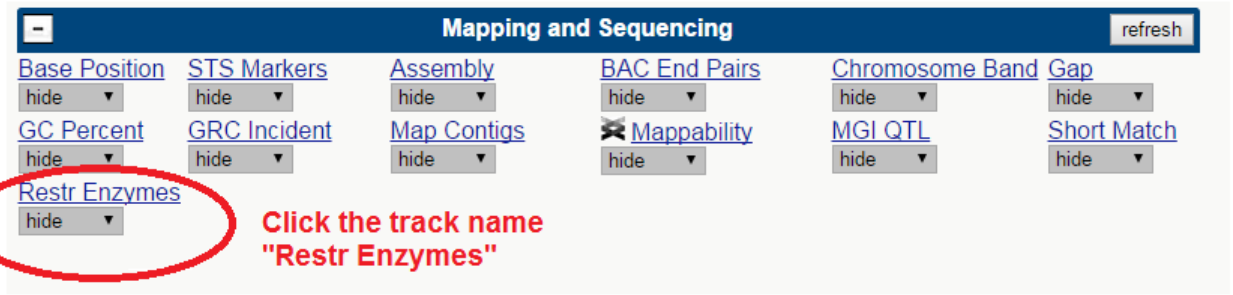
When clicking that, you should see following :

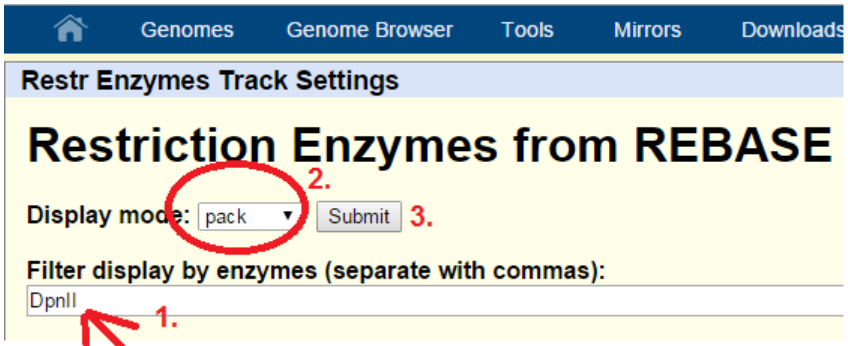


1) Go to the Genomes,
And select the genome, and the gene you want to look at

2) Press “submit”

Scroll down a little – click on “Restr Enzymes” :

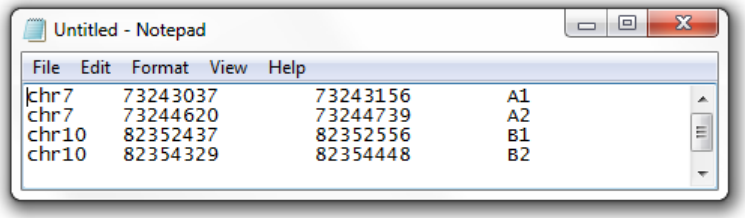




1.
Write your restriction enzyme name here

2.
Select "pack" as the display mode

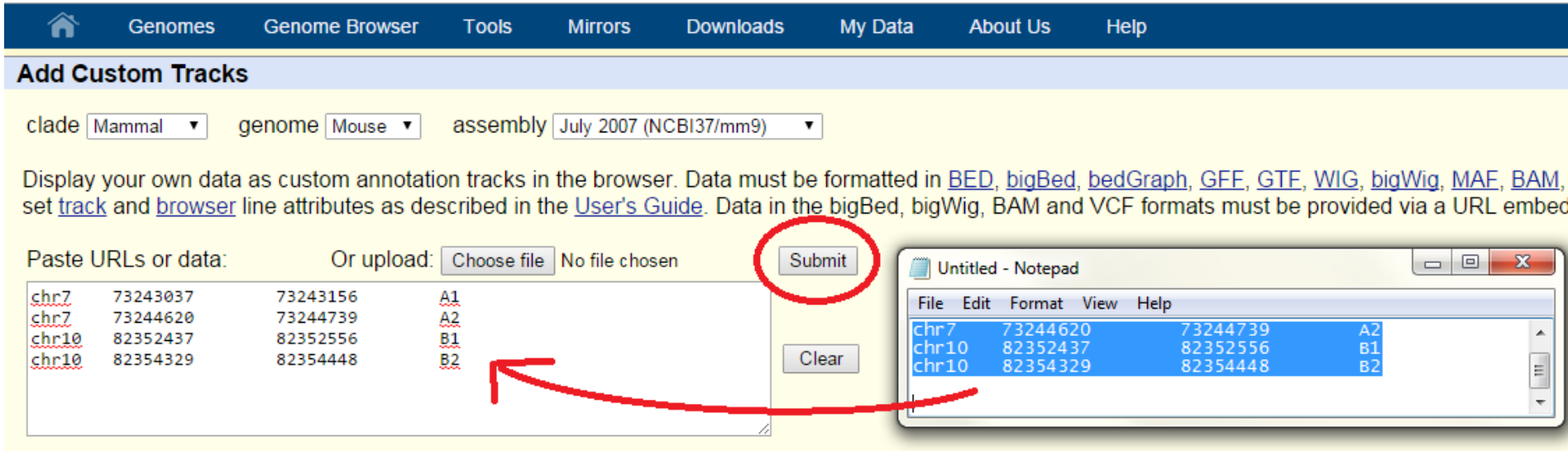
3.
Press "Submit"

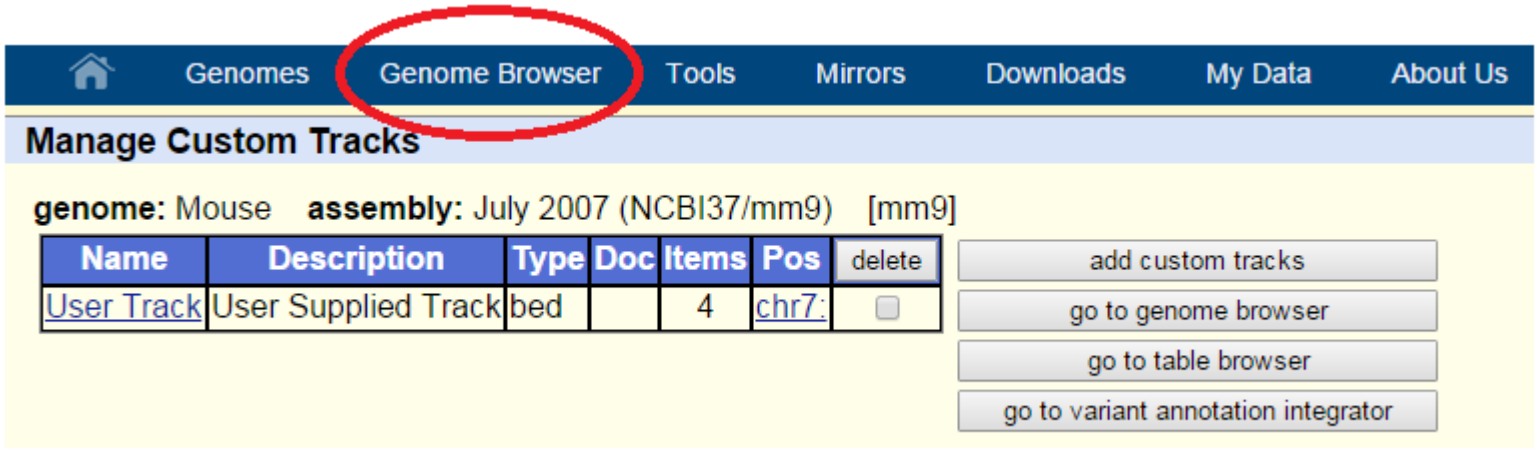


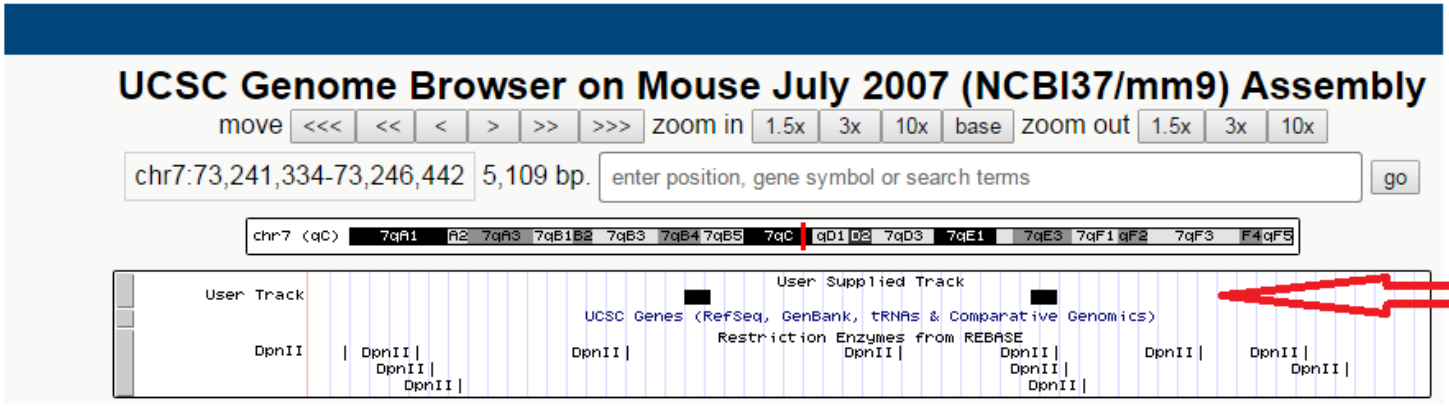
Write a file of your BIOTINYLATED CAPTURE OLIGO coordinates.

col1	col2	col3	col4
chr	start	stop	name

Copypaste your coordinates to custom track field :

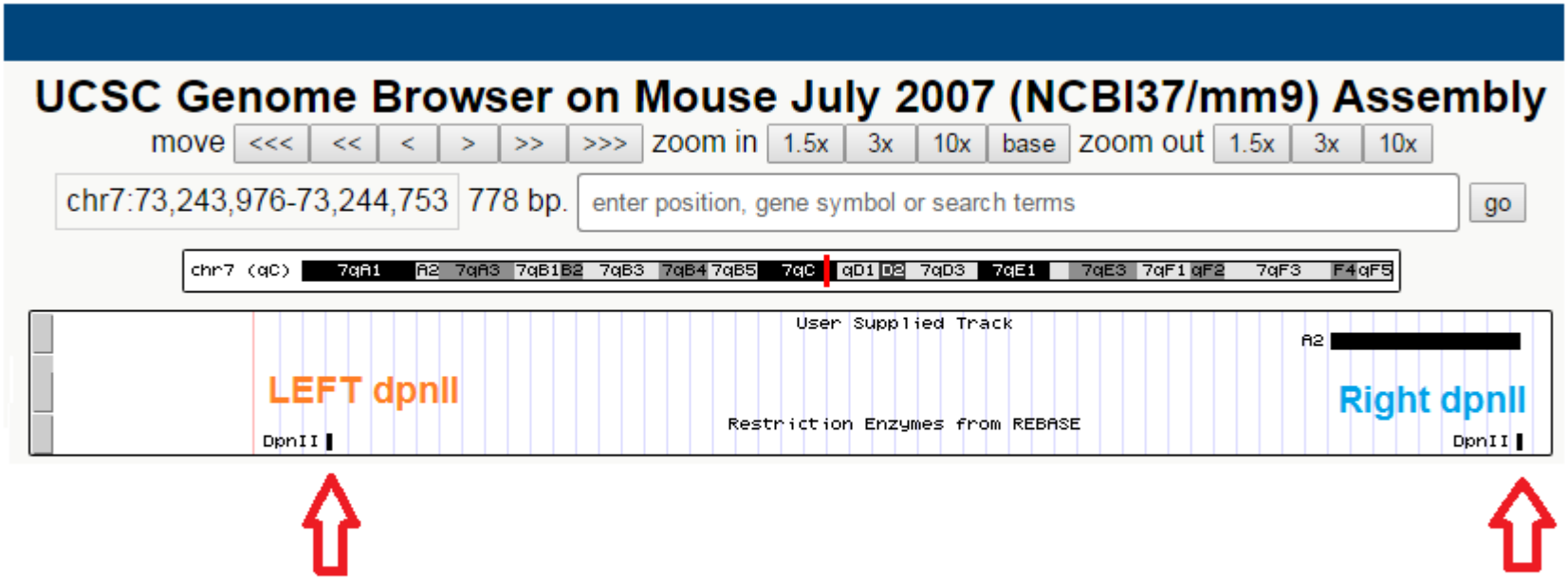




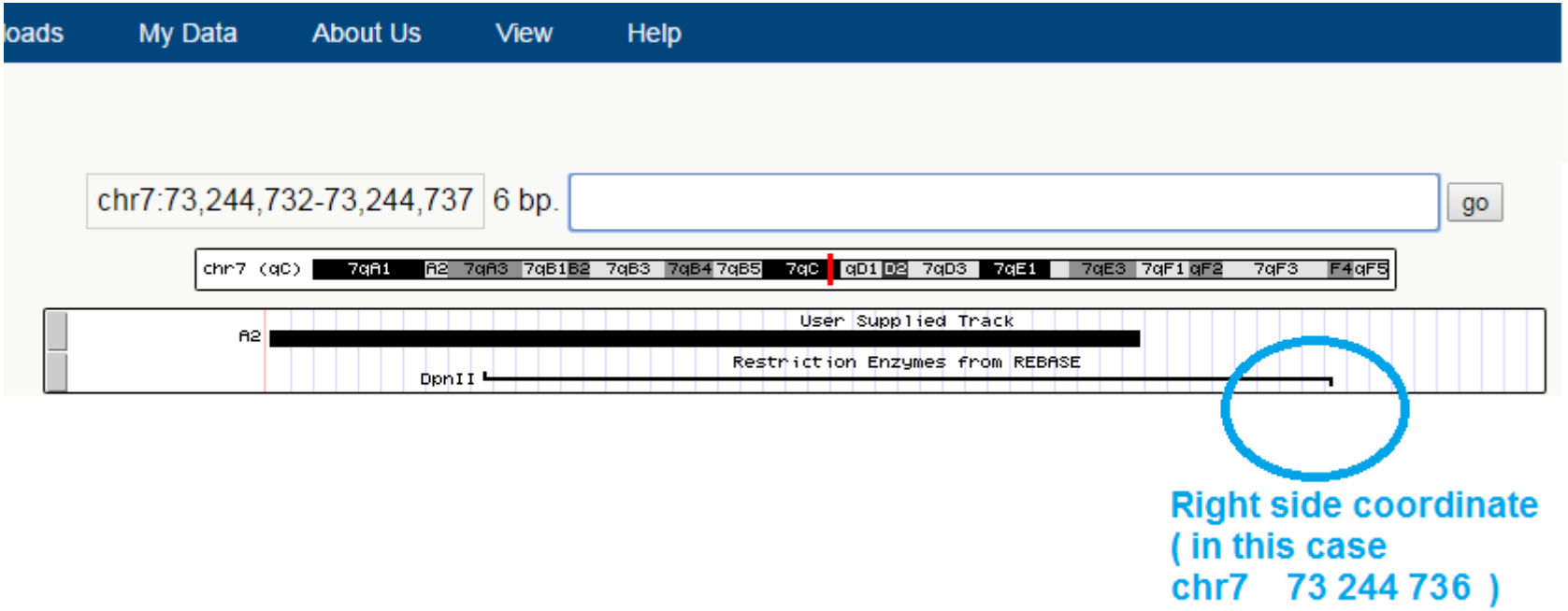


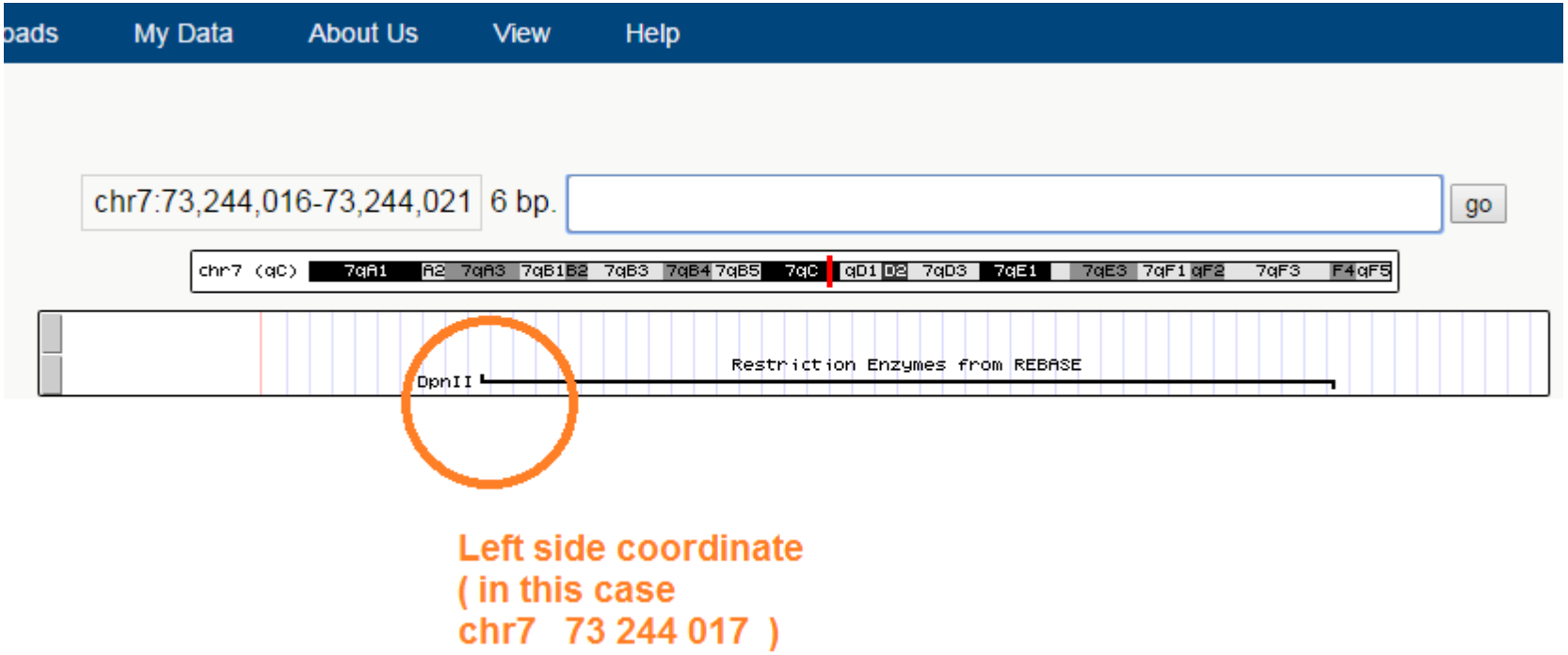
"User track" = your biotinylated oligos !

DpnII cut sites !



Zoom in so, that you can see in which DpnII fragment your oligo is !


oads
My Data
About Us
View
Help
chr7:73,244,732-73,244,737
6 bp.
go
chr7 (qC)
User Supplied Track
A2
Restriction Enzymes from REBASE
DpnII
Right side coordinate
(in this case
chr7 73 244 736)


oads
My Data
About Us
View
Help
chr7:73,244,016-73,244,021
6 bp.
go
chr7 (qC)
Restriction Enzymes from REBASE
DpnII
Left side coordinate
(in this case
chr7 73 244 017)

Left side coordinate

chr7 73 244 017

Right side coordinate

chr7 73 244 736

The 9-column line for this oligo in the oligo-coordinate file will now be :

A1	7	73244017	73244736	7	73243017	73245736	1	A

Coordinates of the DpnII fragment

Exclusion fragment coordinates (DpnII flanked by 1000bases both directions)

"A1" is the name of the oligo capture (first column)

Last two columns are "SNP position" and "SNP base"
- 1 and A are good defaults to state "I don't have a SNP defined"

To define SNP, the same line would look like this :

A1	7	73244017	73244736	7	73243017	73245736	73244516	C