

User's Guide to the Theoretical Fingerprint Generator

This Excel macro generates the data you need to enter into the “theoretical” page of the **Main Processing Tool** (aka “WholeProcess” file).

You will need two FASTA text files, one for the complete and unambiguous insert sequences of your control clones, the other for the probe set you are using.

(FASTA format looks like this:

```
>name1  
ACTGACGGTAAC(sequence1)  
>name2  
(sequence2)
```

and is saved as a plain text file if you use Word to generate it)

- Make sure the order of control clone data in the FASTA file matches the order clone data appears in the **Main Processing Tool**. Also make sure the order of the probe sequences matches the order of probe data columns input into the **Main Processing Tool**.
- Open the **Theoretical Fingerprint Generator**.
- Delete everything on page “vector” and go to the “readme” page. Put the file name and path for the control clone sequence file in cell A3 and the file name and path for the probe sequence file in cell A4. Include the file extensions (.txt).
- Go to the “vector” page again and click Tools-> Macro -> Macros-> Vector. **Do not run the Vector macro if you are still on the “readme” page.** The theoretical binding for each clone and probe (“0” for not binding, “1” for binding) will be given on the sheet.
- **Make sure the order of probes and clones matches the order of output of clones and probes that will be pasted into the “Avg” sheet of the Main Processing Tool before you paste this into the “theoretical” page!**

(Note: the order of the clones will be the same order that is in the original ImaGene quantified data output, and therefore also in the Background Subtraction macro output.)