



Research Core Unit Transcriptomics

Evaluation of single features' (spots') quality using Agilent's Feature Extraction software

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1. Author's note

- Instructions are located on the left side of the slide
- Instruction related visual presentations are located on the right side of the slide
- In these visual presentations, crucial information is highlighted by a red arrow
 (----)
- In case, that more than one arrow is needed, text passages and arrows are numbered, accordingly

2. Download

- □ Visit Agilent's <u>homepage</u>
- Download Version 10.7

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Feature Extraction has now been incorporated as part of Agilent's release of Feature Extraction, please download the Agilent Genou Agilent's eArray application. Please note that Feature Extraction edition.	s Genomic Workbench. To mic Workbench (AGW) sof is only available as part of	access the latest ware from he AGW standard		
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2. Download the Feature Extraction software Commissed (157 Mbytes) Software Ru K you currently have a Feature Extraction license, writy that it wi if is not compatible, then download the trial license. Lownload the 30-day trial license	evision Table II work with this software version.		

3. Installation I

- Double-click the downloaded file
- Click Next & decide wether or not to accept the agreement
- At the third party database question just click Next



3. Installation II

- Select components & destination where it is proposed
- In some cases operating system needs to be updated
- Agree to restart your computer
- Finish installation



4. Starting I

Next Window click Abbrechen(1) & then OK(2)

Please Note: You will have to do this for every start of the program

- Either no license exists or the license supplied is invalid. If you wish to point the software to a valid license file, please click retry, otherwise click cancel.

 Wiederholen
 Abbrechen
 1

 FE
 X

 Software Entitlement Certificate that you received as well as the host id for the computer you installed the software on to obtain a valid license. The host id can be determined from Feature Extraction software by selecting the Help menu, About...

 2
 K
- After that check the box at the lower left corner(3)
- □ Then click *Close*(4)
- □ After that click *Nein*(5)

Feature Extraction is now ready for use



5. Feature Number

- Click the respective cell within the FeatureNum-Column (column N for single color data; column I for dual color data) to identify the feature number of the spot you would like to inspect
 - Write down Feature Number & Array Column



6. Usage I

To open a TIFF-file(1)

- Select *File -> Open -> Image*
- Navigate through the TIFFfolder on your CD(2)
- Double-click the TIFF-file

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6. Usage II

The TIFF-file will open

- Select Color -> Use Log Color Scale(1)
- Then load grid file
 - Select Feature Extraction -> Load Visual Result(2)
 - Navigate your CD in order to find the grid file(3)
 - Double-click the shp-file



6. Usage III

- To use the grid file
 - Select View -> Extraction Results
 - Deselect View Outliers Only(1)
- This done, your file should look like this(2)



7. Find Feature I

- To find a specific Feature Number(1)
 - Select View -> Find Feature
- In the next window enter Array Column(2) & Feature Number(3)
- Click the *OK*-Button(4)





7. Find Feature II

- The centered spot(1) is the one you are looking for
- Navigate your mouse cursor over the middle of the centered spot

Additional information will appear (2) It can be used, verifying, whether having the right spot or not



7. Find Feature III

- In order to compare the quality of one spot across all 4 Arrays
 - Repeat the Find Feature I-II Procedures by iteratively selecting all 4 arrays columns

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8. Find Feature Manually

- To take a closer look manually
- Mark the area concerned with your mouse(1)
- Now the area concerned will be displayed(2)





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