# Description of Affymetrix Electronic Data Format used in DrugMatrix

Data File Formats:

- This applies to data from the Rat Genome U34A, RAE230A and Rat 230 2.0 chips.
- Data from each array should be provided as a PLIER Affymetrix TXT Metrics Report file.
- This report can be saved as a text file from the Absolute Expression Analysis (CHP) Report Metrics tab in the GCOS 1.3 software.
- The essential columns in this file are the "Probe Set Name" and "Signal" columns, which should be in the 3rd and 6th positions, respectively. Column headers should be the first row of the file and should have these exact names and spellings.
- To create the Metrics Report, do the following:
    1. In the GCOS 1.3 or 1.4 software, perform an absolute analysis of a CEL file using a baseline comparison to generate a CHP file.
    2. Double click the CHP file icon to open the Expression Analysis Window (EAW).
    3. Click the "Metrics" tab in the EAW.
    4. Use the "Save As…" menu to save a Metrics TXT file.
    5. Close the Expression Analysis Window before opening the next CHP file.
- Follow the above 5 steps for each CHP file in your Toxicogenomics experiment.
- TIP: Saving each Metrics file with a first letter of "X" or "C", depending on if it represents a treatment (X) or control (C), will make it much easier to load the data into DrugMatrix.
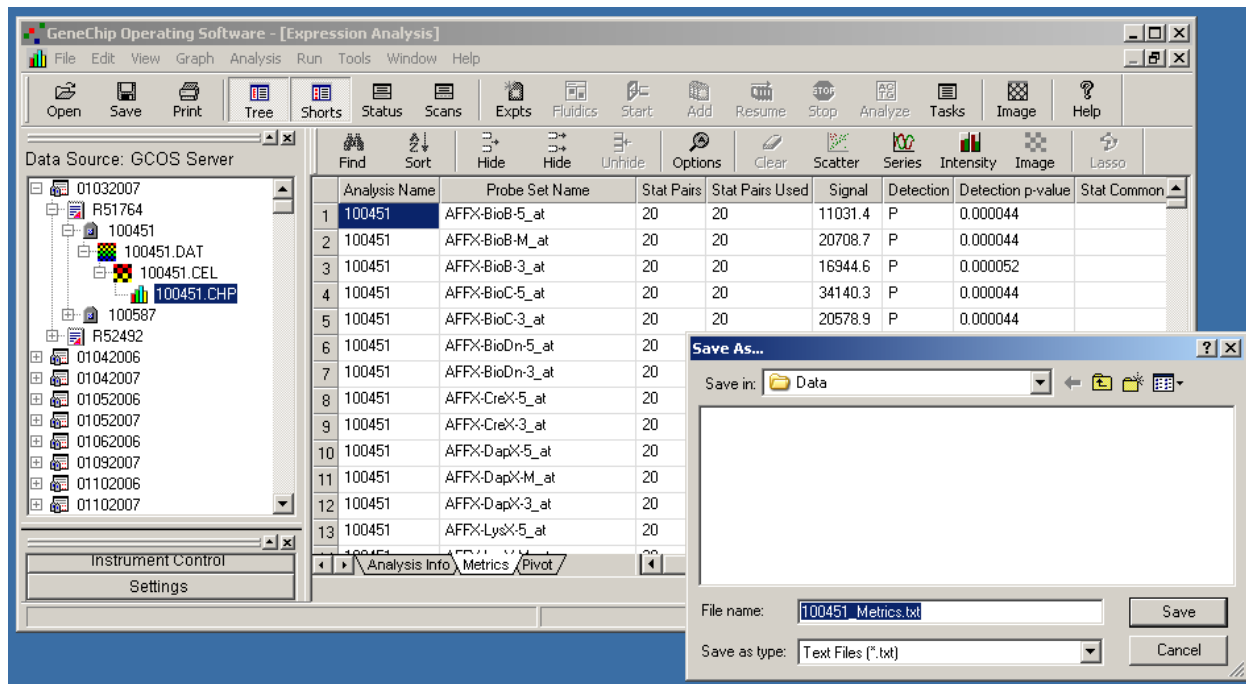
- An example of the resulting file format is shown on the next page.

Example of an AffyMetrix CHP Metrics File:

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Expression Analysis: Metrics Tab


        Analysis Name    Probe Set Name     Stat Pairs   Stat Pairs Used  Signal    Detection   Detection p-value   …more cols…
1       compound1        AFFX-MurIL2_at     20           20               19        A           0.749204
2       compound1        AFFX-MurIL10_at    20           20               7.7       A           0.749204
3       compound1        AFFX-MurIL4_at     20           20               2.4       A           0.876428
4       compound1        AFFX-MurFAS_at     20           20               10.4      A           0.659339
5       compound1        AFFX-BioB-5_at     20           20               365.4     P           0.015183
6       compound1        AFFX-BioB-M_at     20           20               717.9     P           0.000754
7       compound1        AFFX-BioB-3_at     20           20               250.4     P           0.000972
8       compound1        AFFX-BioC-5_at     20           20               985.2     P           0.000095
9       compound1        AFFX-BioC-3_at     20           20               662.3     P           0.000127
10      compound1        AFFX-BioDn-5_at    20           20               607.4     P           0.00141
11      compound1        AFFX-BioDn-3_at    20           20               3817.9    P           0.00011
12      compound1        AFFX-CreX-5_at     20           20               6334      P           0.000044
13      compound1        AFFX-CreX-3_at     20           20               10233.6   P           0.000052
14      compound1        AFFX-BioB-5_st     20           20               41.3      A           0.287743
15      compound1        AFFX-BioB-M_st     20           20               90.3      A           0.470241
16      compound1        AFFX-BioB-3_st     20           20               22.1      A           0.724854
17      compound1        AFFX-BioC-5_st     20           20               25.8      A           0.824672
18      compound1        AFFX-BioC-3_st     20           20               6.2       A           0.824672
19      compound1        AFFX-BioDn-5_st    20           20               217.3     A           0.089478
20      compound1        AFFX-BioDn-3_st    20           20               208.5     A           0.062929
21      compound1        AFFX-CreX-5_st     20           20               101.4     A           0.102165
22      compound1        AFFX-CreX-3_st     20           20               149.8     A           0.313723
23      compound1        AFFX-DapX-5_at     20           20               25.7      A           0.340661
24      compound1        AFFX-DapX-M_at     20           20               59.1      M           0.042962
25      compound1        AFFX-DapX-3_at     20           20               8.5       A           0.814869
26      compound1        AFFX-LysX-5_at     20           20               4.5       A           0.659339
27      compound1        AFFX-LysX-M_at     20           20               22.5      A           0.51489
28      compound1        AFFX-LysX-3_at     20           20               11        A           0.574038
29      compound1        AFFX-PheX-5_at     20           20               6         A           0.868639
30      compound1        AFFX-PheX-M_at     20           20               2.3       A           0.966323
31      compound1        AFFX-PheX-3_at     20           20               21.6      A           0.559354
32      compound1        AFFX-ThrX-5_at     20           20               12.5      A           0.574038
33      compound1        AFFX-ThrX-M_at     20           20               29.2      A           0.262827
34      compound1        AFFX-ThrX-3_at     20           20               14        A           0.724854
35      compound1        AFFX-TrpnX-5_at    20           20               7.5       A           0.574038
36      compound1        AFFX-TrpnX-M_at    20           20               4.5       A           0.986189
37      compound1        AFFX-TrpnX-3_at    20           20               1.7       A           0.971543
38      compound1        AFFX_Rat_GAPDH_5_at 20          20               6187.2    P           0.000052
39      compound1        AFFX_Rat_GAPDH_M_at 20          20               6488.6    P           0.000044
…more data to end of file…
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