

Profile Plot

The profile plot displays probe(set)/gene intensity values across samples and genes.

We will invoke a profile plot from a gene list child spreadsheet with genes on rows.

- Select the rows to be visualized
- Right-click on a row header of one of the selected rows
- Select **Profile Plot (Orig. Data)** from the pop-up menu (Figure 1)

The screenshot shows the Partek Genomics Suite interface. On the left, a sidebar lists analysis results, including 'Down_Syndrome_vs_Normal (A)'. The main window displays a table with 12 columns: Column #, Probeset ID, Chromosomal Location, Entrez Gene, Gene Symbol, Gene Title, RefSeq Transcript ID, p-value(Type), p-value(Tissue), p-value(Type * Tissue), p-value(Down Syndrome vs. Normal), and Ratio(Down Syndrome vs. Normal). A right-click context menu is open over row 212, with the option 'Profile (Orig. Data)' highlighted. The table contains data for various genes and probesets, including PTTG1P, SUMO3, DSCR3, WRB, ATP5J, SON, USP25, CSTB, EFEMP1, C21orf33, ATP5O, USP16, DUK1, IFNGR2, MRPL39, PIGP, LTN1, TTC3, and ATP5O.

1. Column #	2. Probeset ID	3. Chromosomal Location	4. Entrez Gene	5. Gene Symbol	6. Gene Title	7. RefSeq Transcript ID	8. p-value(Type)	9. p-value(Tissue)	10. p-value(Type * Tissue)	11. p-value(Down Syndrome vs. Normal)	12. Ratio(Down Syndrome vs. Normal)
212	200677_at	chr21q22.3	754	PTTG1P	pituitary	NM_001286822	1.21194e-05	1.94366e-08	0.121414	1.21194e-05	1.55161
275	200740_s_at	chr21q22.3	6612	SUMO3	small	NM_001286416	2.35057e-05	4.24553e-05	0.26166	2.35057e-05	1.60982
3169	203635_at	chr21q22.2	10311	DSCR3	Down	NM_006052	3.16516e-05	0.0500067	0.0167661	3.16516e-05	1.31219
	203635_at	chr21q22.3	7485	WRB	tryptophan rich	NM_001146218	4.02563e-05	7.63954e-06	0.683564	4.02563e-05	1.86134
	203635_at	chr21q21.1	522	ATP5J	ATP synthase,	NM_001003696	4.60628e-05	0.00414671	0.0744811	4.60628e-05	1.80504
	203635_at	chr21q22.11	6651	SON	SON DNA	NM_001291411	4.63436e-05	0.06715	0.0257103	4.63436e-05	1.40251
	203635_at	chr21q11.2	29761	USP25	ubiquitin	NM_001283041	6.29939e-05	0.00773066	0.0353252	6.29939e-05	1.49653
	203635_at	chr21q22.3	1476	CSTB	cystatin B	NM_000100	6.76374e-05	0.000397141	0.613482	6.76374e-05	1.54478
	203635_at	chr2p16	2202	EFEMP1	EGF containing	NM_001039348	7.75104e-05	4.06033e-09	4.06976e-06	7.75104e-05	1.47381
	203635_at	chr21q22.3	8209	C21orf33	chromosome 21	NM_004649	7.78656e-05	0.00482433	0.433046	7.78656e-05	1.47676
	203635_at	chr21q22.11	539	ATP5O	ATP synthase,	NM_001697	8.95525e-05	0.00859787	0.711013	8.95525e-05	1.61131
	203635_at	chr21q22.11	10600	USP16	ubiquitin	NM_001001992	0.000115354	0.00102705	0.285254	0.000115354	1.59764
	203635_at	chr14q32	8788	DUK1	delta-like 1	NM_001032997	0.000118621	2.38791e-09	5.61723e-05	0.000118621	0.54551
	203635_at	chr21q22.11	3460	IFNGR2	interferon	NM_005534	0.000140321	0.000110691	0.0175371	0.000140321	1.34069
	203635_at	chr21q21.3	54148	MRPL39	mitochondrial	NM_017446	0.000140577	0.0102415	0.499643	0.000140577	1.3735
16. 21057	221689_s_at	chr21q22.2	51227	PIGP	phosphatidylyl	NM_153681	0.000188366	4.06409e-06	0.69133	0.000188366	1.69875
17. 14976	215596_s_at	chr21q22.11	26046	LTN1	listerin E3	NM_015565	0.000221164	0.00154082	0.302371	0.000221164	1.52883
18. 7589	208073_x_at	chr21q22.2	7267	TTC3	tetratricopeptid	NM_001001894	0.000318506	2.76105e-06	0.242378	0.000318506	1.54524
19. 16331	216954_x_at	chr21q22.11	539	ATP5O	ATP synthase,	NM_001697	0.000343061	0.0310582	0.814976	0.000343061	1.3383
20. 71714	721847_at	chr13q12.3	100130361	MTM1	small internal	NM_001371503	0.000370017	2.40063e-06	0.160011	0.000370017	1.23108

Figure 4. Selecting Profile Plot for selected rows


The profile plot will be displayed in a new tab (Figure 2). Lines are probe(sets)/genes and columns are samples from the parent spreadsheet.



Figure 5. Basic profile plot. Each line represents a different prob(set)/gene; each column represents a sample from the parent spreadsheet

A basic profile plot will likely need customization. The plot configuration, properties, and control options are the same as shown for a [dot plot](#). We will illustrate a few modifications here.

We can change the row labels to show each sample ID.

- Select  (Select icon)
- Select the **Axes** tab
- Set *Grid* to **1**
- Select **Rotate X-Axis Labels** and set to **90** degrees (rotates counter-clockwise)
- Set *Label Format* to **Column** and select **5. Subject**

We can add symbols to show which group each sample belongs to.

- From the *Shape by* drop-down menu, select **3.Type**
- Select **OK**

Symbols have now been added to each profile line plot (Figure 3).

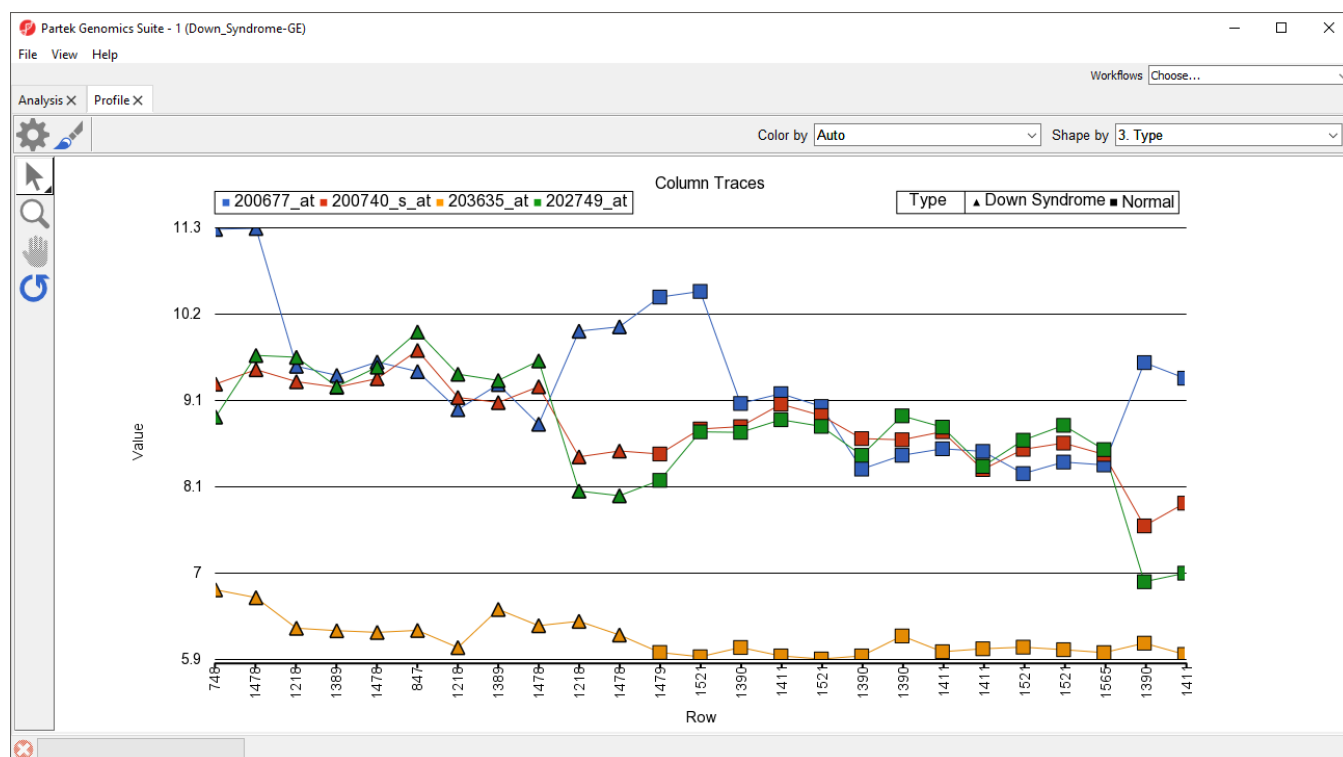


Figure 6. The profile plot can be modified to facilitate analysis or presentation

Note that samples present on the parent spreadsheet cannot be excluded from the profile plot. To plot only a subset of the samples you must filter the parent spreadsheet.

« Dot Plot XY Plot / Bar Chart »

Additional Assistance

If you need additional assistance, please visit [our support page](#) to submit a help ticket or find phone numbers for regional support.



Your Rating:  Results:  34 rates