

TAV File Format Description

The original TAV (TIGR ArrayViewer) file type was an eight-column (short version), tab-delimited text format developed at TIGR for the purposes of storing the intensity values of the spots on a single slide. It is written out by the program TIGR Spotfinder and contains one row for each spot. The first six columns of the file contain positional data for the spots and are followed by two columns of intensity data.

These eight columns are required by Midas and MeV for display and analysis of experimental data. Optional columns can contain flags, annotation, Genbank numbers, etc.

A flag is simply a letter code corresponding to a description of the spot:

- A – 0 non-saturated pixels in the spot
- B – 0-50 non-saturated pixels in the spot
- C – 50 or more non-saturated pixels in the spot
- X – spot is rejected, due to spot shape and intensity relative to background
- Y – background is higher than spot intensity
- Z – spot not detected by Spotfinder.

Row	Column	Metarow	Metacol	Subrow	Subcol	Cy3 Int	Cy5 Int
1	1	1	1	1	1	1784877	1777587
2	1	2	1	1	2	47205	296114
3	1	3	1	1	3	443327	235098
4	1	4	1	1	4	0	0
5	1	5	1	1	5	99362	78752
6	1	6	1	1	6	128894	53126
7	1	7	1	1	7	103781	52196
8	1	8	1	1	8	194146	107295
9	1	9	1	1	9	275681	12977
10	1	10	1	1	10	102280	65244
11	1	11	1	1	11	0	19216
12	1	12	1	1	12	16091	0

A TAV file containing only the required fields

Row	Column	Metarow	Metacol	Subrow	Subcol	Cy3 Int	Cy5 Int	Flag 1	Flag 2	Ratio	Plate#	Well#	clone_id	amplified	GB#	TC#	Com_name
1	1	1	1	1	1	1784877	1777587	B	B	3903	574	73	49570	0	M86720	null	null
2	1	2	1	1	2	47205	296114	C	C	0.925	491	265	4035	2	AA126115	THC1082463	Chloride condu
3	1	3	1	1	3	443327	235098	C	C	0.9532	494	85	5124	1	AA598684	THC1058838	NADH-ubiquinc
4	1	4	1	1	4	0	0	Y	X	0.8092	497	277	6261	1	R11499	null	null
5	1	5	1	1	5	99362	78752	C	C	0.9086	501	73	7741	1	R16600	null	null
6	1	6	1	1	6	128894	53126	C	C	0.7329	504	265	8916	1	R06746	THC1119429	unnamed prote
7	1	7	1	1	7	103781	52196	C	C	0.8043	507	85	10026	1	AA009791	null	null
8	1	8	1	1	8	194146	107295	C	C	0.9263	510	277	11226	1	AA412691	THC1118802	CCAAT-binding
9	1	9	1	1	9	275681	12977	C	C	0.8931	514	73	12708	1	T89094	THC1067707	RGP4; regulat
10	1	10	1	1	10	102280	65244	C	C	1.0188	517	265	13908	1	AA457232	THC1134142	unnamed prote
11	1	11	1	1	11	0	19216	X	C	0.8443	520	85	15018	1	N49263	null	null
12	1	12	1	1	12	16091	0	C	X	1.2875	523	277	16218	2	AA443940	null	null

A TAV file with several extra fields

The full version of TAV exported by spotfinder contains 20 columns which are described as below:

A column is a spot row number in slide.

B column is a spot column number in slide.

C column is a spot metarow number or subrow number.

D column is spot metacolumn number or subcolumn number.

E column is spot row number in a block/grid.

F column is spot column number in a block/grid.

G column is spot intensity in channel A corrected for background.

H column is spot intensity in channel B corrected for background.

I column is spot mean ratio

J column is spot total area in pixels.

K column is spot saturation factor. This measure shows the percentage of nonsaturated pixels in the spot used for integration.

L column is spot median ratio.

M column is spot mode ratio.

N column is spot background in channel A.

O column is spot background in channel B.

P column is spot flag in channel A. This flag is set by QC filter.

Q column is spot flag in channel B. This flag is set by QC filter.

R QC Score for channel A

S QC Score for channel B

T QC Score Total