Quick Guide to TCID Macro

Below is the screenshot of TCID - cutoff Macro



- 1. Click the "Open File" button to the import the raw data file to the macro file.
- 2. The virus name, Expt. ID, Performer or Virus date etc. information needs to be entered by the user.
- 3. TCID dilution data will be shown in the orange box.
- 4. Drop down list allows you to choose which virus to analyze. Virus 1 or Virus 2. (See figure below)

5. If Virus 1 is selected, the top part of the raw data box will be highlighted (see green arrow below) and "Virus 1" text will be shown next to the box.



Fig. 2

If Virus 2 is selected, the bottom part of the raw data box will be highlighted (see green arrow below) and "Virus 2" text will be shown next to the box.

	×	hicro	soft Ex	cel - TCID	ForVisito	r - cutof	f_lock1										
Select vit	''''''''''''''''''''''''''''''''''''''	,	<u>E</u> dit	<u>V</u> iew <u>I</u> nse	ert F <u>o</u> rma	at <u>T</u> ools	<u>D</u> ata	<u>W</u> indow	Help				ľ	Type a	question (or help	8 ×
Select vil	Sciect virus 2		i A	rial		• 9 •	BI	Ū	≣ ≣ 3	-a- 9	\$ %	, <u>.</u> .0	.00	<pre>#</pre>	- 3	• <u>A</u> • _	
	120			★ =AVERAGE(M15:M18)													
		A	В	С	D	E	F	G	Н		J	K	L	M	NO	Р	Q 📈
	1	Vin	us 2 🔻														8
	2	· ·		TCID ASSAY													
	4	Expt	. ID:	xxxx-xx	Viru	s Name:	xxx									0.0.0	n Eilo
	5 Expt. Date: 03/13/09 6 Performer: Wenhong			03/13/09	09 Virus Date:					A	ssay Day:			Oper	TFILE		
				Wenhong	I						Assay Cells: TZM-bl						_
	7	a	044604	745040	100010	405057	10004	44724	1000	2500	45.00	4004	050	005			
	3	vear	750004	743679	420340	130207	42637	14724	4900	2000	1502	1221	950	000	1		
	11	B	758301	694302 768542	368834	115170	32149	10768	3040	1682 2881	1131 1684	1117	861 996	1002 792			
	13	c	854883	769687	483599	138841	45197	14905	5376	2001	1698	1462	1063	867			
	14	D	782399	749943	431240	135458	47776	17548	5827	3454	1496	1138	879	879			
	15	E	687870	453212	155559	38400	13636	5779	2461	1094	922	959	802	882			
	16	F	613995	413474	131548	34629	10210	3812	2321	2001	1734	1243	1191	929			
	17	GH	632277	439874 407626	114480 117040	28863 28860	9151 8277	3453 3538	1651	1538 1465	1321 1198	1102 1315	951 1144	892 960	Virus 2		
	+0		057407	4295.47	400057	20000	40940	44.46	2404	4505	4004	4455	4022	046	1		
	20	væar	607407	420047	129657	32000	10319	4746	2104	7525	7294	1155	1022	910	•		
	23		_			Start Dilutio									~		
	H 4	•		D50/													
	Read	ły															

Fig. 3

6. In this macro, the default cutoff value is 150,000 RLU. The virus dilution at $\pm 10\%$ of the cutoff value (150,000 RLU) is also shown.



The user may enter a value in the Recommended Dilution cell value and click "Get RLU" and the corresponding RLU value will appear in the Corresponding RLU cell. Likewise, the user may 3 of 4 Pages

enter a value in the Corresponding RLU cell and click "Get Dilution" and the corresponding dilution will appear in the Recommended Dilution cell . NOTE: These cells are indicated by a double lined orange box. Please enter the value you need to use directly into these double lined orange boxes). For example, below the Recommended Dilution value generated by the macro is 243 if the user enters 145,000 in the Corresponding RLU cell . *Please note minor changes to the RLU value may result in the same corresponding virus dilution. These cells are formatted to display integer values giving the appearance there is no change. However, the macro is performing appropriately.*

Microsoft Excel - TCIDForVisitor - cutoff_lock1																			
:2	Eile	Edit	⊻iew	Insert	F <u>o</u> rma	at <u>T</u> ools	<u>D</u> ata	<u>W</u> indow	<u>H</u> elp					Type a	question l	for help	-	.8×	
				Aria	ıl		• 10 ·	- B 2	<u>u</u>	E = :	= -a-	\$ %	, <u></u> .00	.00	< .		ða 🗸 .	A -	
	P2	6	•	fx															
	A	В	С		D	E	F	G	Н		J	K	L	M	N O	P		Q 🗖	
1	Vir	us 1 🔻																	
2	-						TC	ID ASS	AY										
4	Exp	. ID:	xxxx-	x	Viru	is Name:	XXX				-					0.0			
5	5 Expt. Date: 03/13/0			09	Vii	us Date:	Assay Day: 2								Open File				
6 Performer: Wenhong Assay Cells: TZM-bl																			
9	Vlean	811631	74563	9 4	28348	135257	42631	14724	4988	2566	1502	1221	950	885					
11	A	758301	69430)2 3	68834	115170	32149	10768	3040	1682	1131	1117	861	1002	1				
12	в	850940	76854	2 4	29717	151560	45401	15675	5710	2881	1684	1165	996	792					
13	C	854883	76968	37 4	83599	138841	45197	14905	5376	2245	1698	1462	1063	867	Virus 1				
14	D	782399	74994	3 4	31240	135458	47776	17548	5827	3454	1496	1138	879	879				=	
15	E	687870	45321	2 1	55559	38400	13636	5779	2461	1094	922	959	802	882					
17	G	632277	41347	4 I 12 1	31340 14480	28863	9151	3453	1651	2001	1734	1243	951	929 892					
18	Ň	695805	40762	26 1	17040	28860	8277	3538	1982	1465	1198	1315	1144	960					
20	Vlean	657487	42854	17 1	29657	32688	10319	4146	2104	1525	1294	1155	1022	916					
22	3 Start Dilution: 10																		
24										Dilutio	n Factor								
26	25 Diution Factor: 5											_							
27									Daw	Dilutia	n/TCID)					-			
28		Virus	Dilution) at	165,000	RLU	230	_	ROW	Dilutio		mear	IRLU						
30	D Virus Dilution at			at 1	150,000	RLU	240		1		10	811631]					
31	31						050			50	745619								
32	Virus Dilution at 135,000			. 253			3	1 1250		428348		-							
34	34								5	6250		42631		1					
35	35							6	31250		14724]						
36	36 Recommended Dilution)n	24	3	Get Dilution		7	15	6250 1250	4988		-					
38	38 Corresponding RLU			1450	45000 Get RLU				3906250		1502		1						
39	J9						10	195	31250	12	21	1							
40	1									976	56250 0000	9	50	J					
								cut			0000	1						_	
- 4 - 4 14			D50 /									111						×	
Dec			0307									init j							
кеа	цγ																		

Fig. 5

Please let me know if you have any questions or suggestions.

Thank you! Peter Gao, Database Analyst Montefiori Lab, Duke University Tel: +1 919 668 2111; juanfei.gao@duke.edu