

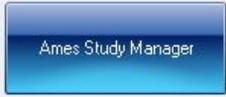
ProtoCOL 3

Ames Study Manager - Quick Guide

The Ames module has two levels of functionality. The *Simple Ames* module allows the user to measure plates with the same name and find the difference in colony numbers to assess the level of mutagenicity. The *Ames Study Manager* is a more in-depth report focused module that allows the user to input all the relevant experimental information before calculating the ratio of revertant colonies on test sample and solvent control plates.

Start ProtoCOL 3 software

1 Enter  → Log on to ProtoCOL 3

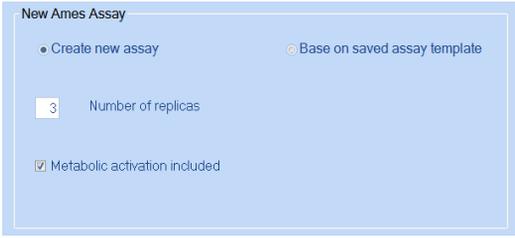
2   → Click **New Batch** and choose **Ames Plate**. Select **Ames Study Manager** and measure all your plates in the same way as an ordinary Pour Plate batch

3  Ames Study →  → Once all plates are measured, go to the **Results** tab, click **Create Report** and select **Ames Study** and **Run Ames Test**

Select Plates

4  → Hold down Ctrl while clicking names to select the plates you wish to include in the study. To select multiple plates at once, click on the first plate you want to include, then hold down the shift key and click on the last plate

Click OK

5  → Select whether you want to create a **new assay** or base on a **saved assay** template

Enter the number of **replicas** used and whether **metabolic activation** was included

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Ames no metabolic activation		Ames with metabolic activation	
Titles	Entries	Titles	Entries
Study #	123	Ames heading 1	
Case #	456	Ames heading 2	
Temperature	37	Ames heading 3	

➔ This space allows you to fill in additional information relevant to your study

They can be filled in or left blank

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Fill in information

Plate	Strain	Sample Type	Sample	Dose	Replica	Metabolic Activation	Plate Count
1	S. typhimurium TA102	Positive Control	Sodium azide	5	Replica1	<input type="checkbox"/>	220
2	S. typhimurium TA102	Positive Control	Sodium azide	5	Replica2	<input type="checkbox"/>	236
3	S. typhimurium TA102	Positive Control	Sodium azide	5	Replica3	<input type="checkbox"/>	228
4	S. typhimurium TA102	Solvent Control	Water	None	Replica1	<input type="checkbox"/>	228
5	S. typhimurium TA102	Solvent Control	Water	None	Replica2	<input type="checkbox"/>	238
6	S. typhimurium TA102	Solvent Control	Water	None	Replica3	<input type="checkbox"/>	18
7	S. typhimurium TA102	Untreated Control	Untreated Control	None	Replica1	<input type="checkbox"/>	218
8	S. typhimurium TA102	Untreated Control	Untreated Control	None	Replica2	<input type="checkbox"/>	18
9	S. typhimurium TA102	Untreated Control	Untreated Control	None	Replica3	<input type="checkbox"/>	218
10	S. typhimurium TA102	Test Product	Chemical X	5	Replica1	<input type="checkbox"/>	233
11	S. typhimurium TA102	Test Product	Chemical X	5	Replica2	<input type="checkbox"/>	220
12	S. typhimurium TA102	Test Product	Chemical X	5	Replica3	<input type="checkbox"/>	228
13	S. typhimurium TA102	Test Product	Chemical X	10	Replica1	<input type="checkbox"/>	234
14	S. typhimurium TA102	Test Product	Chemical X	10	Replica2	<input type="checkbox"/>	224
15	S. typhimurium TA102	Test Product	Chemical X	10	Replica3	<input type="checkbox"/>	228
16	S. typhimurium TA102	Test Product	Chemical X	15	Replica1	<input type="checkbox"/>	233

➔ Use the drop-down menus to fill in information about the study. These templates can be saved for use in the future

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➔ Click **Finish** to generate the Ames Study report

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View batch report

	A	B	C	D	E	F	G	H	I
1	Pour Plate Report								
2	Batch Name:	Ames Testing							
3	Report created by:	shauna	30/07/2018 15:57:25						
4	ProtoCOL3 version:	1.2.10.32							
5	Based on:								
6	Batch Exposure Time	0.38							
7	Batch Sensitivity	95.3							
8	Batch Reject Small Partis	0.5							
9	Batch Maximum Colony Count								
10	Colony Name	A							
11	Split Colonies	Yes							
12									
13	Ames heading 1	1							
14	Ames heading 2	1							
15	Ames heading 3	1							
16									
17	Strain	Sample	Dose	Replica 1	Replica 2	Replica 3	Mean	Standard Deviation	Ratio Treated/Solvent
18	S. typhimurium TA102	Sodium azide	10	228	238	18	161.333333333333	101.434180364686	
19	S. typhimurium TA102	Water	10	218	18	218	151.333333333333	94.2809041582063	
20	S. typhimurium TA102	chem x	10	233	220	228	227	5.35412818479834	1.5
21	S. typhimurium TA102	chem x	100	234	224	228	228.666666666667	4.10960933531265	1.51101321585903
22	S. typhimurium TA102	chem x	1000	233		233		0	1.53964737709251
23	S. typhimurium TA102	Untreated Control	None	220	236	228	228	6.53197284742181	1.50660792951542
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➔ Review and/or save the batch report

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