



# **AGILECON SOFTWARE**

## **USER MANUAL**

Version 1.4



ACTGene Inc. provides this publication “as is” without warranty of any kind, either express or implied, including, but not limited to the implied warranties of merchantability or fitness for a particular purpose.

Information in this publication is subject to change without notice and does not represent a commitment on the part of the vender.

Any errors or omissions which may have occurred in this publication despite the utmost care taken in its production will be corrected as soon as possible, but not necessarily immediately upon detection.



## Contents

System Requirements .....	- 1 -
Software Installation .....	- 2 -
To start AgileCon .....	- 3 -
AgileCon Menu Software Structure .....	- 4 -
Main Window Overview .....	- 4 -
Section A Menu .....	- 5 -
Section B Tool bar .....	- 8 -
Section C Message .....	- 8 -
Section D Temperature monitor .....	- 8 -
Section E Status monitor .....	- 8 -
Section F Working area .....	- 9 -
Section G Desktop Bar .....	- 10 -
AgileCon Function .....	- 11 -
Basic Parameters .....	- 11 -
Define Primary and Reference wavelengths .....	- 12 -
Starting method to read plates .....	- 12 -
Plate motion .....	- 13 -
Using the built-in Incubator .....	- 13 -
Using the built-in Shaker .....	- 13 -
Measurement unit.....	- 13 -
Define Calculation .....	- 13 -
Well Mapping.....	- 14 -
Quantitative .....	- 15 -
Cutoffs .....	- 16 -
Ratio/Inhibition.....	- 16 -
Q.C.....	- 17 -
Print options .....	- 18 -
AgileCon connection setup.....	- 19 -
Start AgileCon under PC mode .....	- 19 -
Setup Connection between AgileCon and the PC .....	- 19 -
Setting up USB connection Between AMPR-750 and AgileCon .....	- 20 -
Main Menu Configuration .....	- 21 -
Graphic User Interface .....	- 21 -
File menu functions .....	- 21 -
Experiment menu functions .....	- 22 -
Setup menu functions.....	- 23 -
Tool Bar Menu Configuration .....	- 24 -



Defining Parameters for Experiment.....	- 26 -
Defining Parameters.....	- 26 -
Well Mapping.....	- 30 -
Quantitative measuring method.....	- 33 -
Cutoff measuring method .....	- 36 -
Ratio/Inhibition Calculation Method .....	- 38 -
Q.C. Calculation Method .....	- 39 -
Printing options.....	- 40 -
Interpreting the results.....	- 41 -
Appendix A .....	- 47 -
Setting of USB Serial Port .....	- 47 -



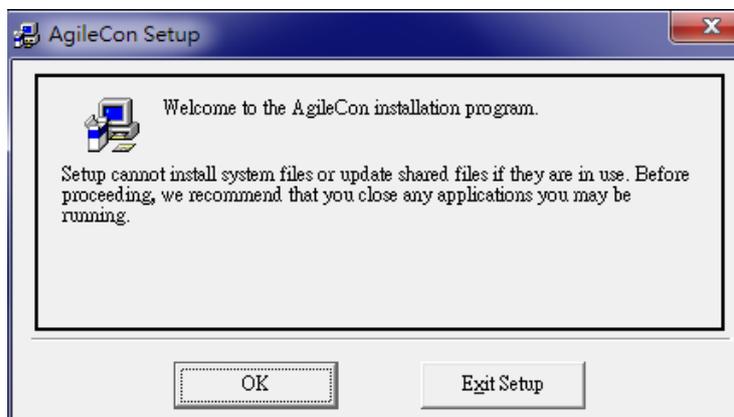
## **System Requirements**

- 128MB of RAM above for Windows XP/ Windows Vista/Windows 7.
- Microsoft Office 2003/Microsoft Office 2007/Microsoft Office 2010
- 20MB of available hard drive for the program files
- CD-ROM drive
- 16bit color display / 800 x 600
- Keyboard, mouse, and RS232 serial port or USB

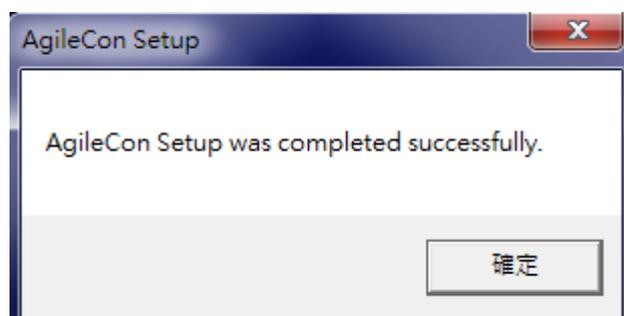
## Software Installation

To install AgileCon Software

1. Start Windows
2. Close all unnecessary Windows programs
3. Place CD in the CD-ROM drive
4. Copy the software from CD-ROM to the Computer
5. Double click setup.exe program
6. Click OK on the AgileCon setup menu

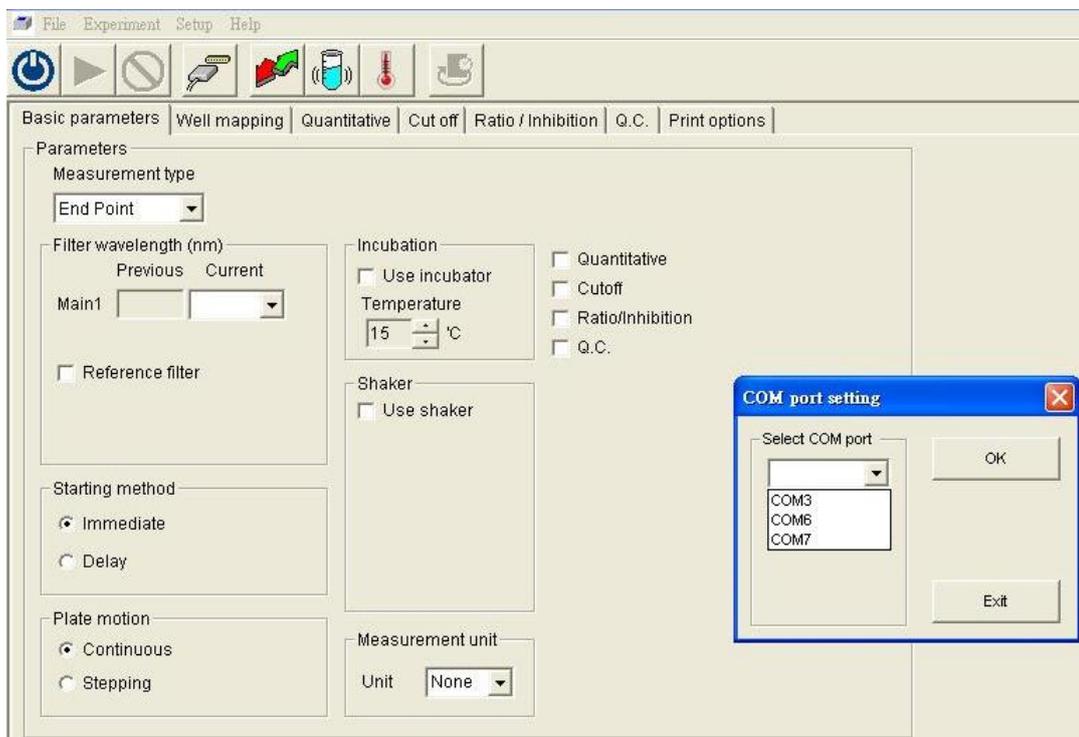


7. Click on the icon  to install
8. Select Program group then click continue, the AgileCon software will start installation
9. Click OK when the AgileCon finishes installation



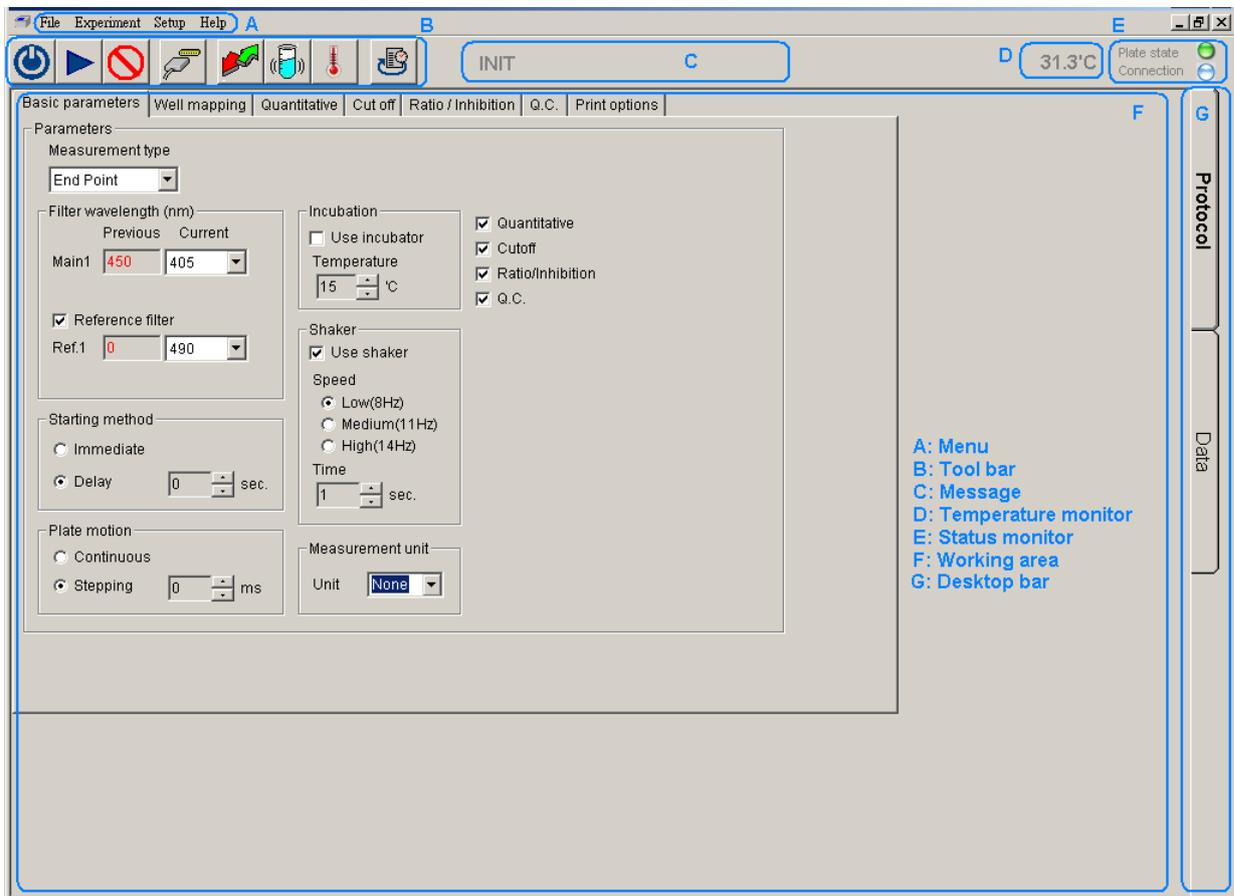
## To start AgileCon

1. From Start menu → Programs → ACTGene → AgileCon
2. Select the correct COM port for connection then click OK.



## AgileCon Menu Software Structure

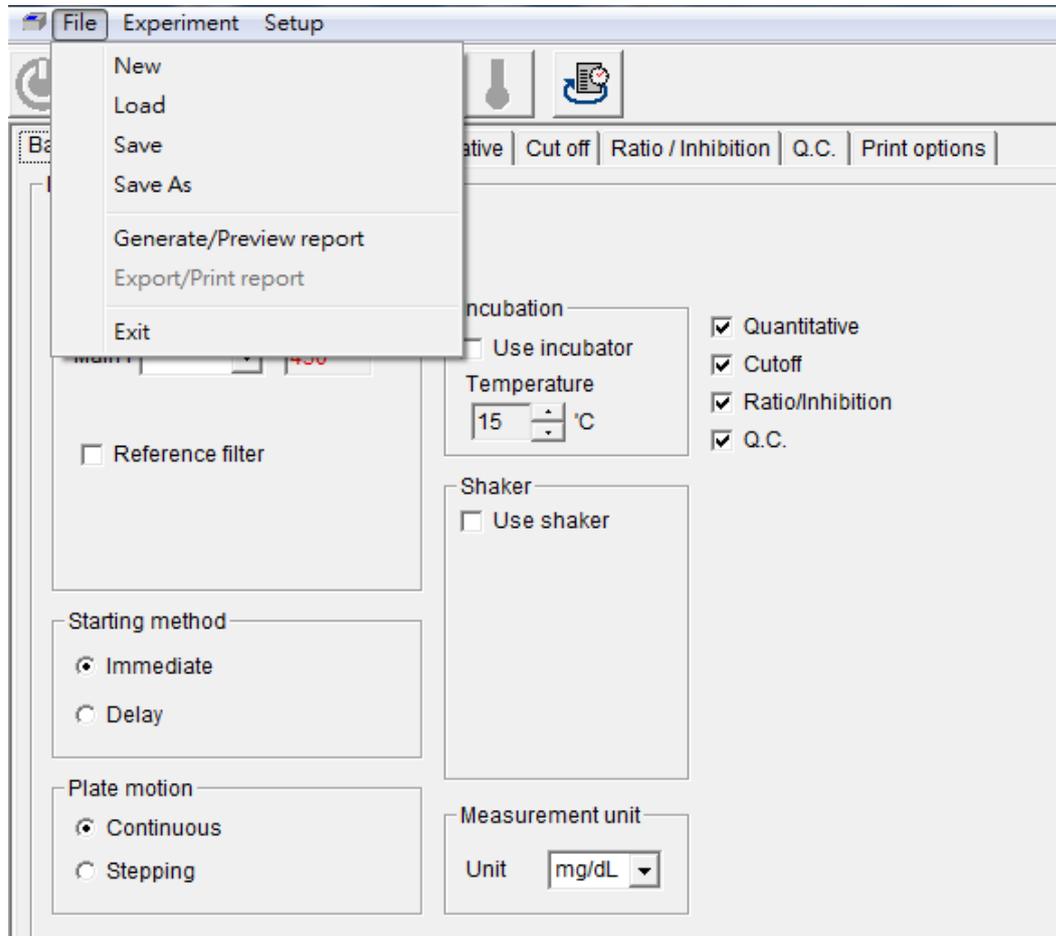
### Main Window Overview



- Section A: Menu
- Section B: Tool bar
- Section C: Message
- Section D: Temperature monitor
- Section E: Status monitor
- Section F: Working area
- Section G: Desktop bar

## Section A Menu

The File Menu contains function for processing data from the AgileCon



**New** : open new file window (Default file name is new.exp)

**Load** : Load an existing results record

**Save** : Save the experiment parameters

**Save As** : Save the results under a new ID

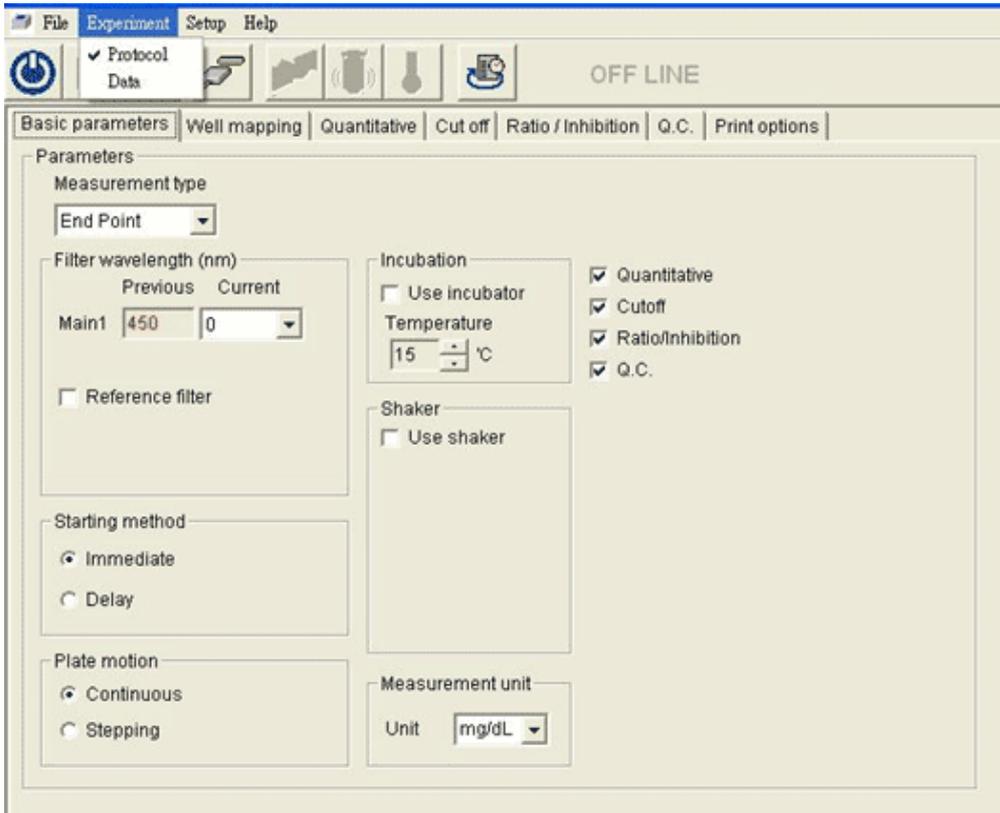
**Generate/Preview report** : Generate experiment report in data

**Export/Print report** : Export report to excel file, and select to print report

**Exit** : Close the AgileCon software

- Experiment Menu

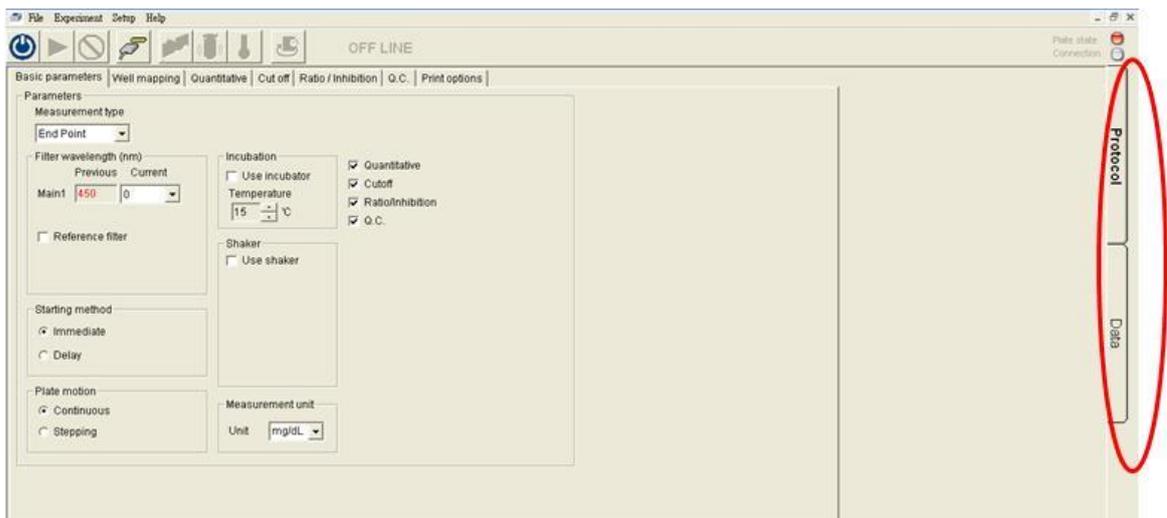
Experiment Menu contains function to set the experiment and view the data



Protocol: Set the environment

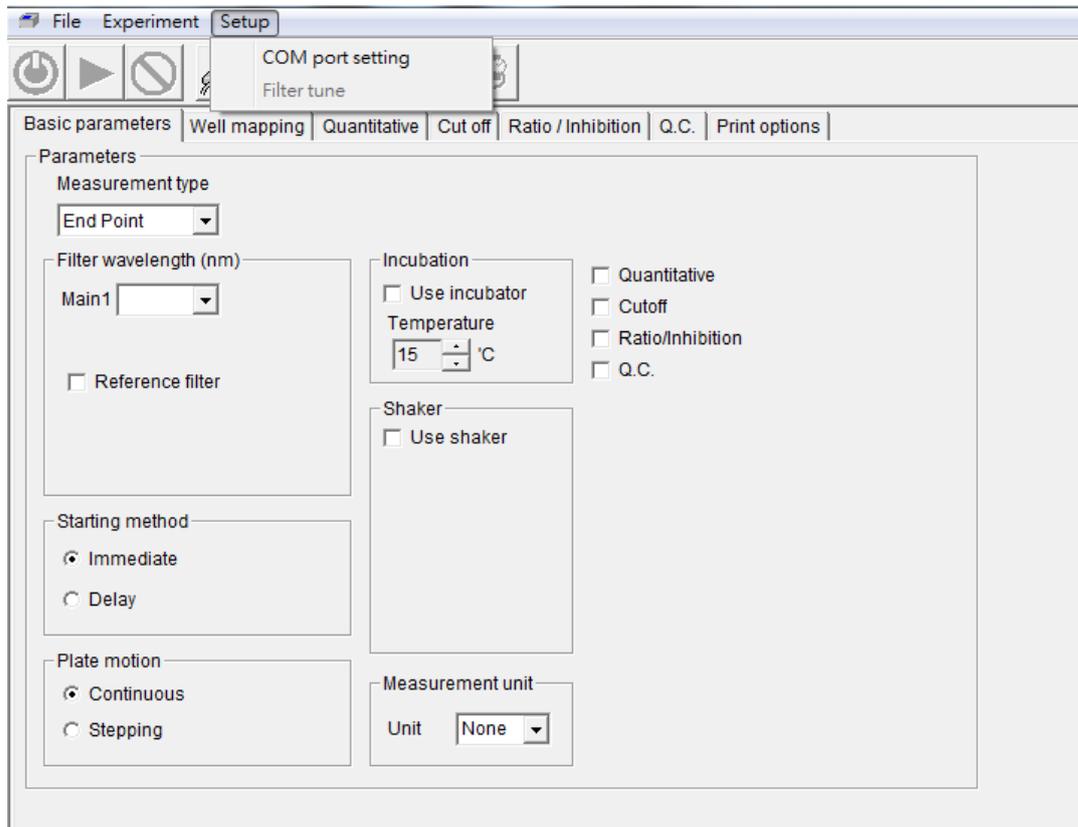
Data: View data for the experiment

The Protocol and Data function can also function on the right tab of the main menu



- Setup Menu

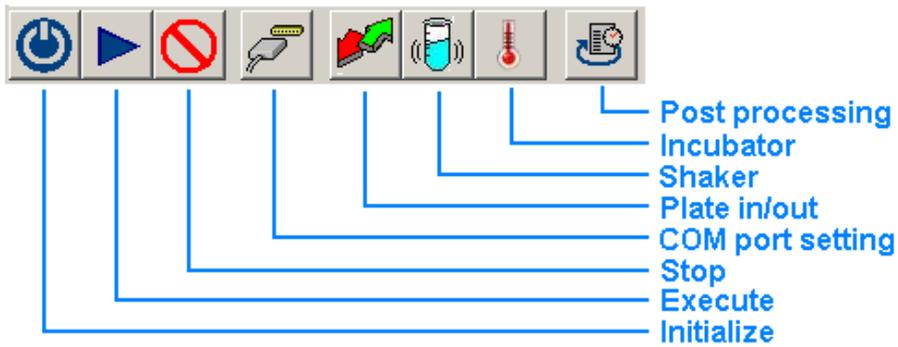
The setup menu contains the AgileCon system configuration



COM port setting : To set the communication COM port between the AgileCon and PC

Filter tune : The AgileCon can setup to 8 different filter wavelength. Config the filter wavelength.

### Section B Tool bar



Initialize : Any commands issued from the AgileCon to the AMPR-750 must initialize first.

Execute : To start the defined protocol

Stop : To stop executing the defined protocol

COM port setting : To set the COM port to communicate between the AMPR-750 and the PC

Plate in/out : To open or close the plate compartment

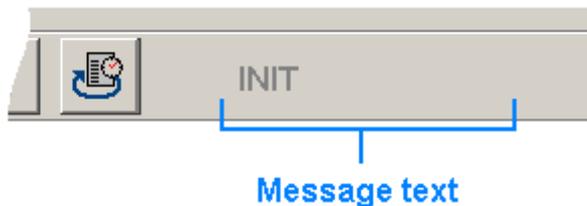
Shake : To start the shaking function on the AgileCon

Incubator : To manually start the incubator, when incubator is initialized the temp will show on section D temp monitor.

Post processing : Use the current protocol to re-process data results.

### Section C Message

During operation the message will show on the right side of the tool bar



### Section D Temperature monitor

When incubator is active the temperature will show on the right side of the tool bar

### Section E Status monitor

After initialize the tool bar will show the plate state, and the connection status. The plate in/out is defined as green/red. The connection on/off is defined as blue/grey



## Section F Working area

The AgileCon allows you to define protocols and acquiring microplate data, an .exp experiment file will contain 2 information, the Protocol and the Data. The Protocol is to define parameters, the data is to show experiment data.

The screenshot displays the AgileCon software interface. At the top, there is a menu bar (A) with 'File', 'Experiment', 'Setup', and 'Help'. Below it is a toolbar (B) containing various icons for power, play, stop, and other functions. A message box (C) displays 'INIT'. The status bar (E) shows a temperature of '31.3°C' and 'Plate state Connection'. The main area (F) is titled 'Basic parameters' and contains several configuration sections:
 

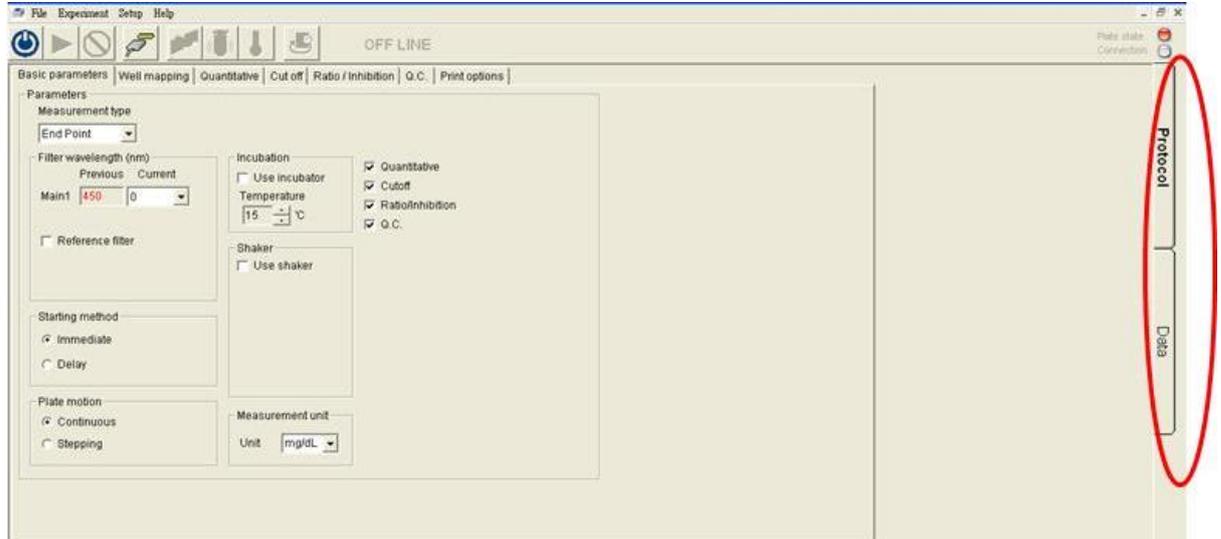
- Parameters:** Measurement type set to 'End Point'.
- Filter wavelength (nm):** Main1 set to 450, Current set to 405.
- Reference filter:** Ref.1 set to 0 and 490.
- Starting method:** 'Delay' selected with a value of 0 seconds.
- Plate motion:** 'Stepping' selected with a value of 0 milliseconds.
- Incubation:** 'Use incubator' unchecked, Temperature set to 15°C.
- Shaker:** 'Use shaker' checked, Speed set to 'Low(8Hz)', Time set to 1 second.
- Measurement unit:** Set to 'None'.

 On the right side, there are vertical tabs for 'Protocol' and 'Data'. A legend on the right side of the window identifies the labeled areas:
 

- A: Menu
- B: Tool bar
- C: Message
- D: Temperature monitor
- E: Status monitor
- F: Working area
- G: Desktop bar

## Section G Desktop Bar

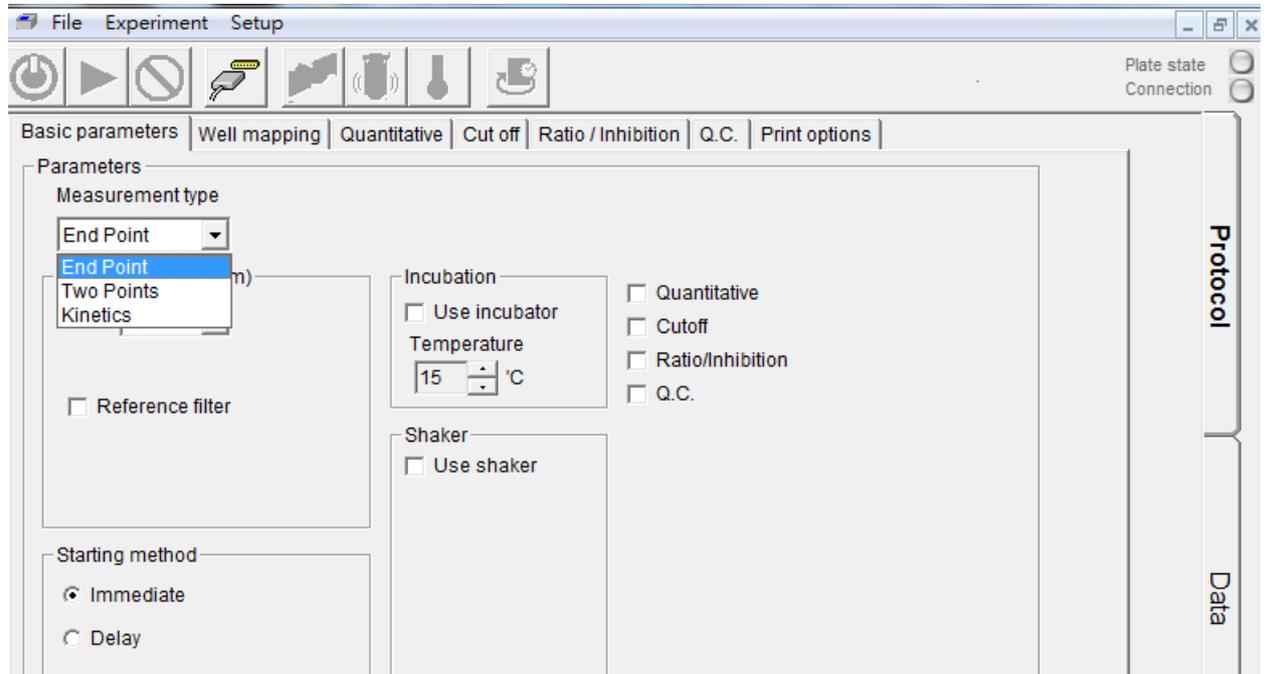
The desktop bar is to select between the Protocol and the Data, this function can also be accessed under experiment.



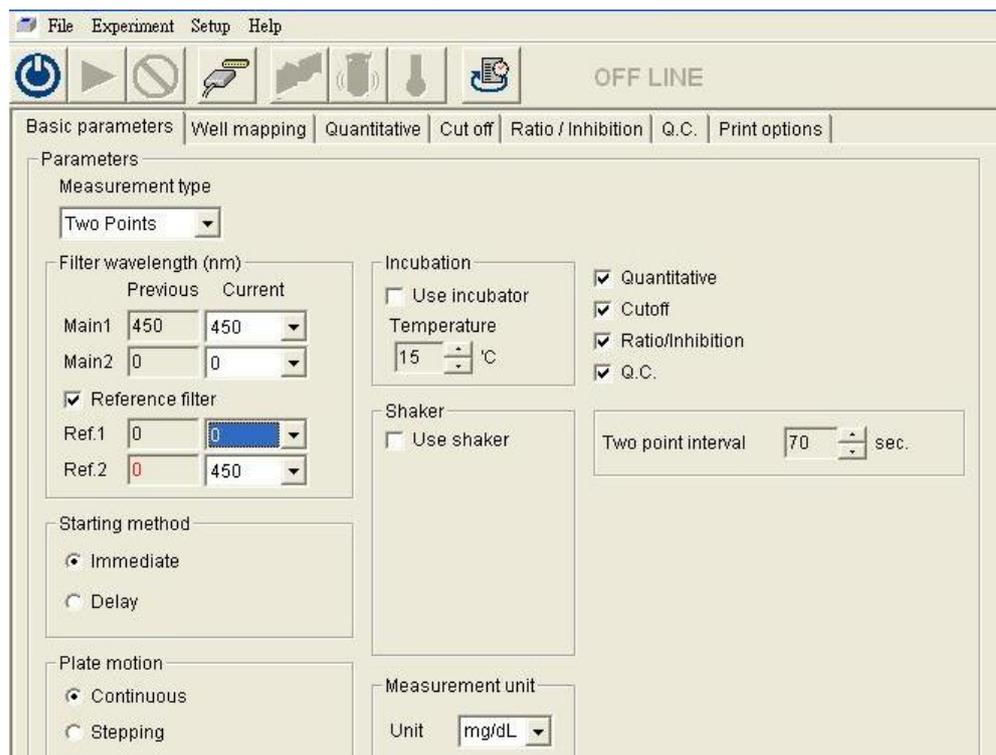
## AgileCon Function

### Basic Parameters

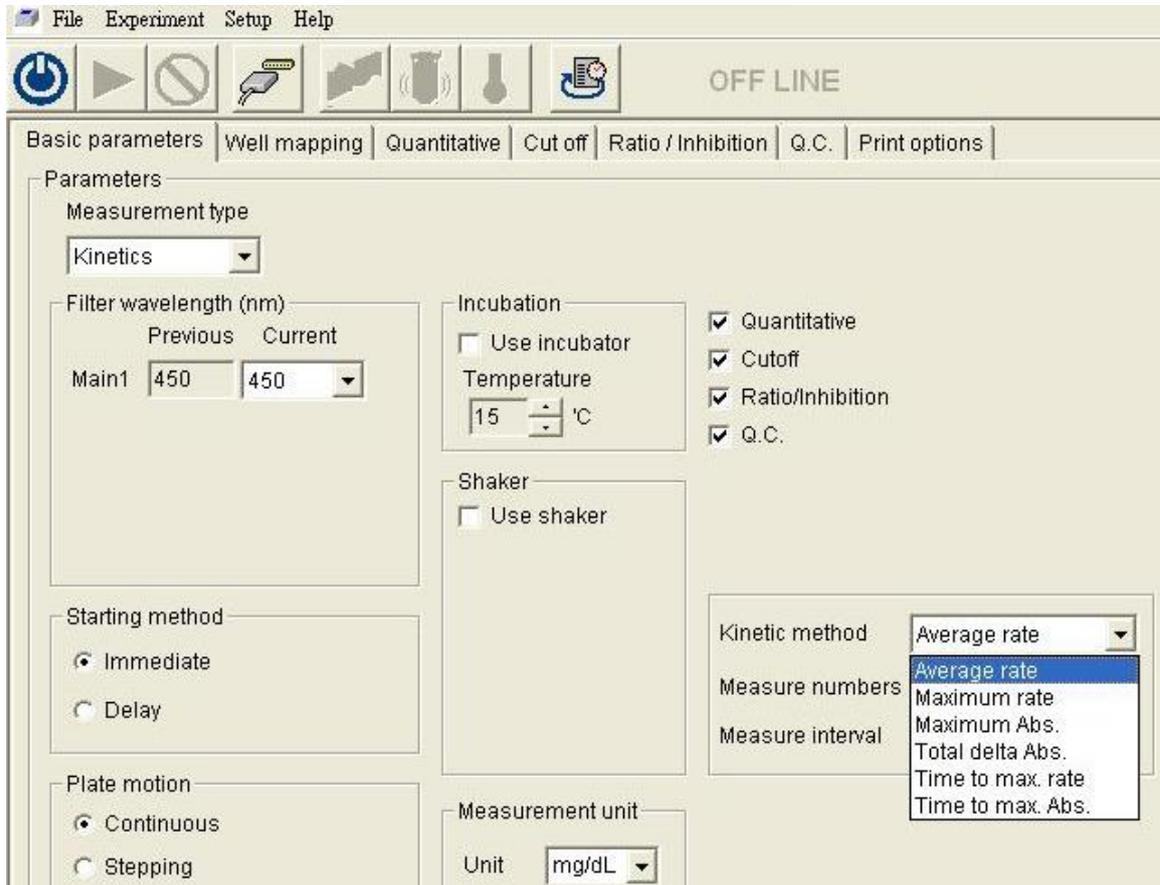
- Measurement types: The AgileCon provides 3 types of measurement types, end point, two point, and Kinetics.



- Two points read: During the two points read the AMPR-750 reads at 2 wavelength, with 2 reference reads as optional.



- Kinetics read: During a kinetics read users can define the kinetic method by select the Kinetic method tap. User can define average rate, Maximum rate, Maximum Abs, Total delta Abs, Time to max. rate, and Time to max. Abs. User can also define the number of times the plate been read and intervals.



To select a measurement type

Click the tap under measurement type and select the desired method of End point, Two points, Kinetics.

### Define Primary and Reference wavelengths

If a Primary wavelength is defined alone the AMPR-750 reads the plate only once at a single wavelength. If a Reference wavelength is defined the plate will be read twice and automatically to calculate the delta Abs between the two readings.

To select the Primary and Reference wavelengths:

1. Select the Measurements type of End Point, and Two Points.
2. Enter the Primary wavelength in Main1 or Main2, and the reference Ref1 or Ref2

### Starting method to read plates

Users can define the starting method of plates reading. Immediately the AMPR-750 starts reading the plate right after executing tap is pressed. Users can also define how

long the plate reading delays.

To define the starting method

1. Click on the immediate tap or define how many seconds needed to be delayed.

### **Plate motion**

Users can define the plate motion while reading the plate to be Stepping in milliseconds or Continuous.

### **Using the built-in Incubator**

The incubator will set the temperature of the plate at ambient temperature.

Users can enable the Incubator by

1. Click the use incubator tab.
2. Enter the desired temperature.

### **Using the built-in Shaker**

The built-in Shaker in AMPR-750 can let user define 3 settings, low 8Hz, Medium 11Hz, and High 14Hz. Users can also define how long the shaker needs to be active by seconds.

To enable the Shaker

1. Click the Use shaker tab
2. Define the speed Low, Medium, High
3. Define the time in seconds.

### **Measurement unit**

Users can define the Measurement unit to suit their experiments needs.

To define the Measurement unit

1. Click on the unit tab, and select the desired Measurement unit.

### **Define Calculation**

User can define Quantitative, Cutoff, Ratio/Inhibition, and QC calculation method

To define calculation method

1. Click on the tab in respect to Quantitative, Cutoff, Ratio/Inhibition, and QC calculation
2. The AgileCon lets users define each calculation method criteria.

## Well Mapping

Users can define 5 types of different wells, Blank, Standard, Sample, Positive, and Negative.

To define Well Mapping

1. Click on the Well mapping tap on the main working acres
2. Users can define Blank, Standard, Sample, Positive, and Negative, for each well

The screenshot shows the 'Well mapping' tab in the software. The interface includes a menu bar (File, Experiment, Setup, Help), a toolbar with various icons, and a status bar indicating 'OFF LINE'. Below the toolbar are tabs for 'Basic parameters', 'Well mapping', 'Quantitative', 'Cut off', 'Ratio / Inhibition', 'Q.C.', and 'Print options'. The 'Well mapping' tab is active, showing a 'Map layout' section with a grid of wells. The grid has 12 columns and 8 rows (A-H). The wells are color-coded and labeled as follows:

	1	2	3	4	5	6	7	8	9	10	11	12
A	T 1-1 SAM01	T 2-1 SAM02	T 3-1 SAM03	T 4-1 SAM04	T 5-1 SAM05	T 6-1 SAM06	T 7-1 SAM07	T 8-1 SAM08	T 9-1 SAM09	T 10-1 SAM10	T 11-1 SAM11	T 12-1 SAM12
B	T 1-2 SAM01	T 2-2 SAM02	T 3-2 SAM03	T 4-2 SAM04	T 5-2 SAM05	T 6-2 SAM06	T 7-2 SAM07	T 8-2 SAM08	T 9-2 SAM09	T 10-2 SAM10	T 11-2 SAM11	T 12-2 SAM12
C	T 1-3 SAM01	T 2-3 SAM02	T 3-3 SAM03	T 4-3 SAM04	T 5-3 SAM05	T 6-3 SAM06	T 7-3 SAM07	T 8-3 SAM08	T 9-3 SAM09	T 10-3 SAM10	T 11-3 SAM11	T 12-3 SAM12
D				P 1-1 POS01	C 1-1 STD01	C 2-1 STD02	C 3-1 STD03	C 4-1 STD04	C 5-1 STD05			
E				P 1-2 POS01	C 1-2 STD01	C 2-2 STD02	C 3-2 STD03	C 4-2 STD04	C 5-2 STD05			
F				Z 1-1 BLK01	C 1-3 STD01	C 2-3 STD02	C 3-3 STD03	C 4-3 STD04	C 5-3 STD05			
G				N 1-1 NEG01	C 1-4 STD01	C 2-4 STD02	C 3-4 STD03	C 4-4 STD04	C 5-4 STD05			
H				N 1-2 NEG01	C 1-5 STD01	C 2-5 STD02	C 3-5 STD03	C 4-5 STD04	C 5-5 STD05			

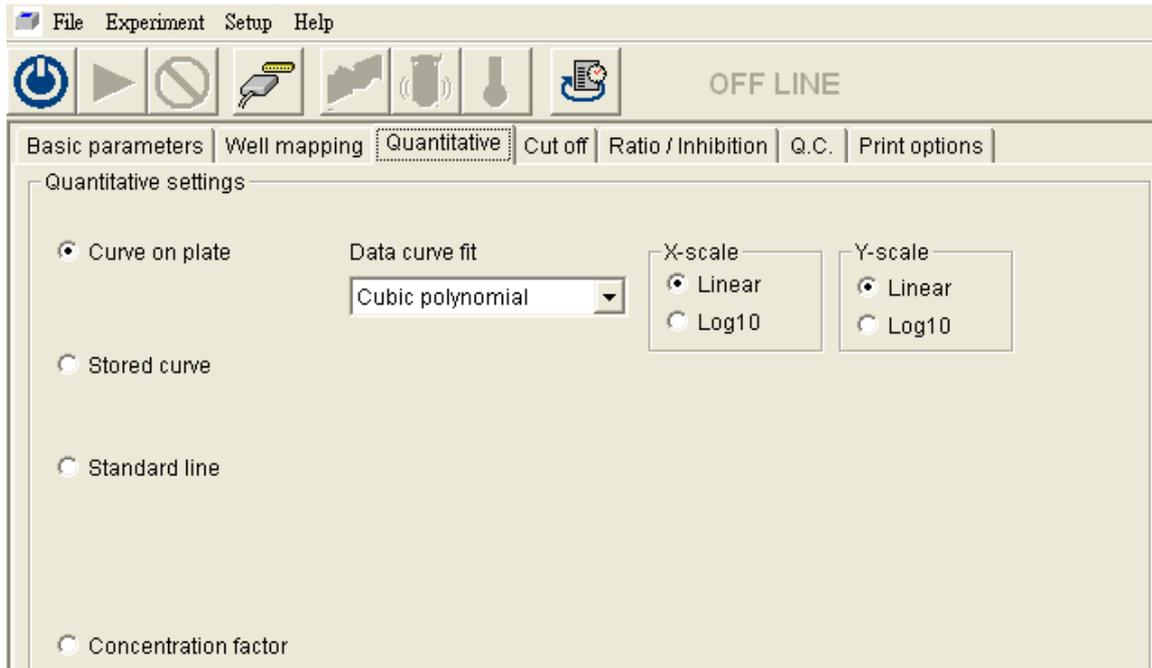
Below the grid, there are controls for defining a well: 'Type' (Sample), 'Name' (SAM13), 'Fill direction' (Row selected), 'Replicate direction' (Row selected), 'Fill number' (1), and 'Replicate number' (1).

## Quantitative

The AgileCon allows user to define quantitative analysis to determine the absolute or relative abundance. There are 4 different types of curve fitting on the AgileCon. Users can use Curve on plate, Stored curve, Standard line, and Concentration factor.

To define Quantitative analysis

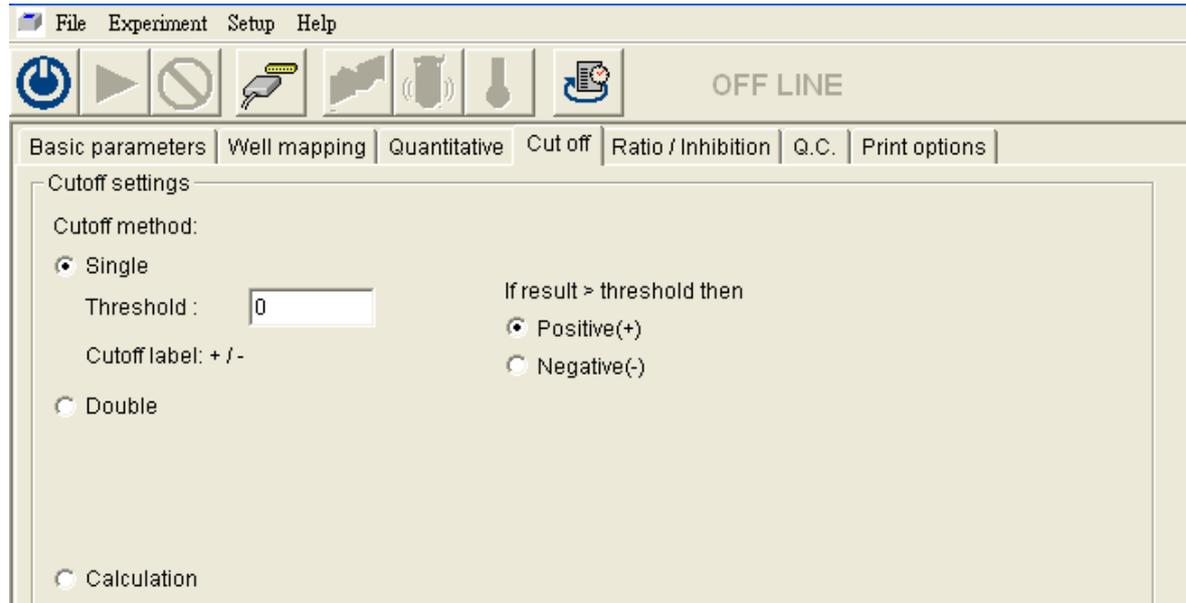
1. Make sure the check mark is clicked on the Quantitative in Basis Parameter
2. Click the Quantitative tap in Basic Parameter
3. Define the desired parameter



## Cutoffs

Cutoffs are used to classify results. Users can define 3 different Cutoff methods, Single, Double, Calculation.

1. Make sure the check mark is clicked on the Cutoff in Basis Parameter
2. Click the Cutoff tap in Basic Parameter
3. Define the desired parameter



File Experiment Setup Help

OFF LINE

Basic parameters Well mapping Quantitative **Cut off** Ratio / Inhibition Q.C. Print options

Cutoff settings

Cutoff method:

Single

Threshold :

Cutoff label: +/-

Double

Calculation

If result > threshold then

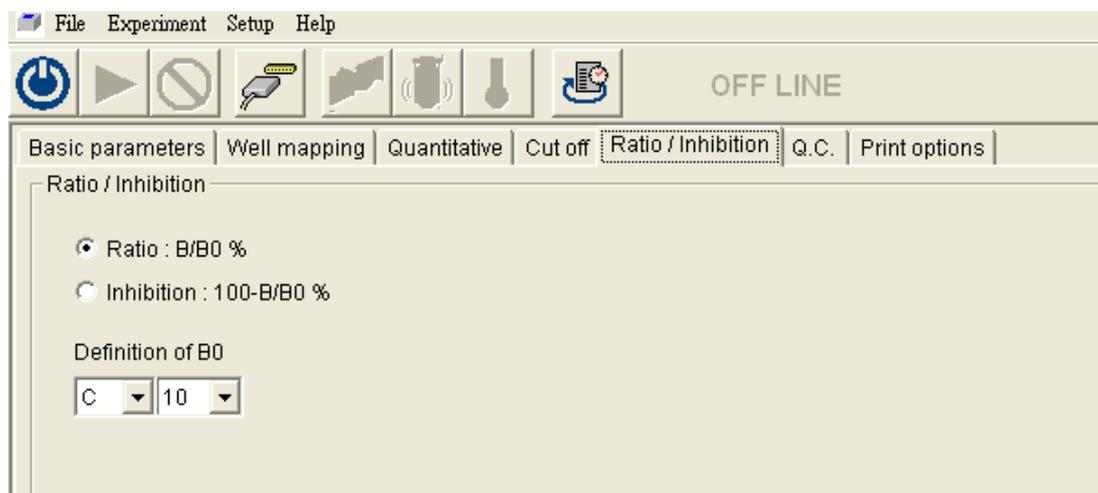
Positive(+)

Negative(-)

## Ratio/Inhibition

The AgileCon will take a standard (B0) and other samples to calculate the Ratio/Inhibition factor

1. Make sure the check mark is clicked on the Ratio/Inhibition in Basis Parameter
2. Click the Cutoff tap in Ratio/Inhibition
3. Define the desired parameter



File Experiment Setup Help

OFF LINE

Basic parameters Well mapping Quantitative Cut off **Ratio / Inhibition** Q.C. Print options

Ratio / Inhibition

Ratio : B/B0 %

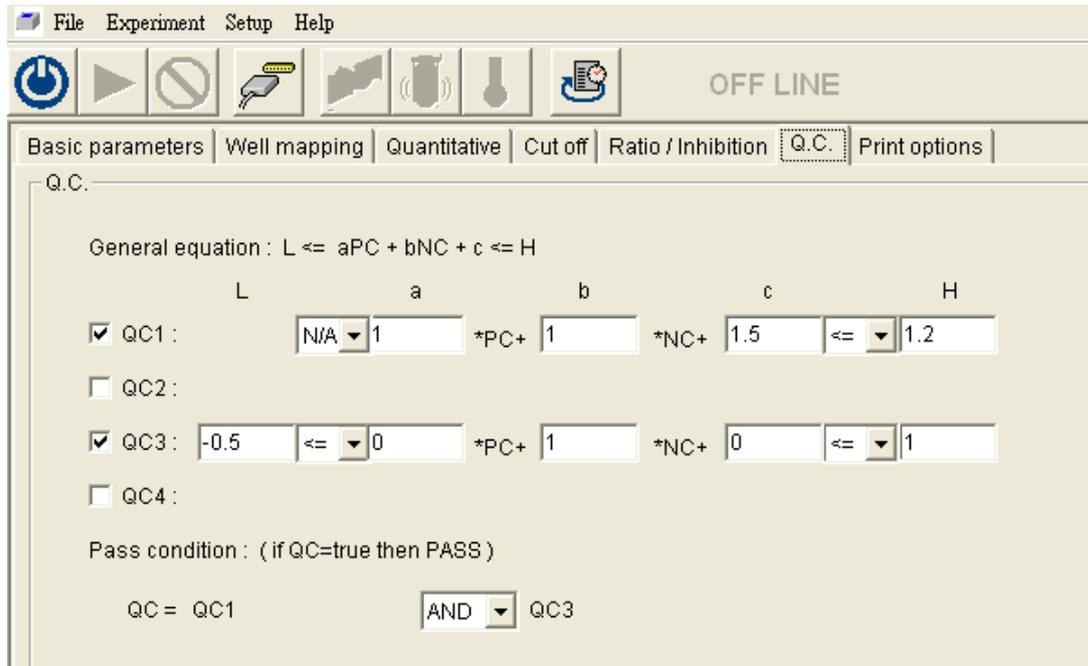
Inhibition : 100-B/B0 %

Definition of B0

### Q.C.

The AgileCon can make Q.C. rules for experiment to determine the results.

1. Make sure the check mark is clicked on the QC in Basis Parameter
2. Click the Cutoff tap in QC
3. Define the desired parameter



File Experiment Setup Help

OFF LINE

Basic parameters | Well mapping | Quantitative | Cut off | Ratio / Inhibition | **Q.C.** | Print options

Q.C.

General equation :  $L \leq aPC + bNC + c \leq H$

	L	a	b	c	H
<input checked="" type="checkbox"/> QC1 :	N/A	1	1	1.5	1.2
<input type="checkbox"/> QC2 :					
<input checked="" type="checkbox"/> QC3 :	-0.5	1	1	0	1
<input type="checkbox"/> QC4 :					

Pass condition : ( if QC=true then PASS )

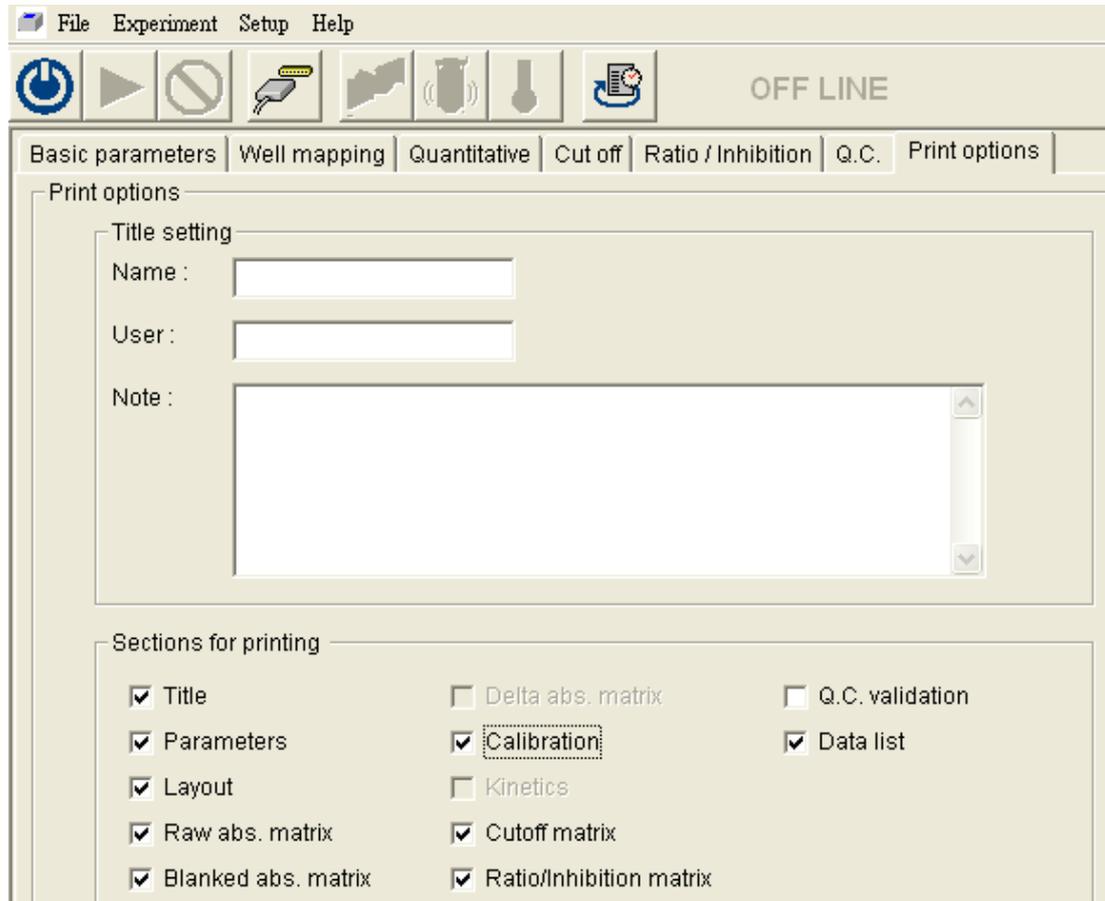
QC = QC1 AND QC3

## Print options

Users can define the Name, User, and Printing selections for the experiments on the AgileCon.

To define print options

1. Click the Print options on the Basic parameters
2. Enter the desired field for print options.



File Experiment Setup Help

OFF LINE

Basic parameters Well mapping Quantitative Cut off Ratio / Inhibition Q.C. Print options

Print options

Title setting

Name :

User :

Note :

Sections for printing

<input checked="" type="checkbox"/> Title	<input type="checkbox"/> Delta abs. matrix	<input type="checkbox"/> Q.C. validation
<input checked="" type="checkbox"/> Parameters	<input checked="" type="checkbox"/> Calibration	<input checked="" type="checkbox"/> Data list
<input checked="" type="checkbox"/> Layout	<input type="checkbox"/> Kinetics	
<input checked="" type="checkbox"/> Raw abs. matrix	<input checked="" type="checkbox"/> Cutoff matrix	
<input checked="" type="checkbox"/> Blanked abs. matrix	<input checked="" type="checkbox"/> Ratio/Inhibition matrix	

## **AgileCon connection setup**

To control the AMPR-750 through the AgileCon, users must set and test the COM port connection on the PC. User can connect the AgileCon with AMPR-750 through USB or RS232 interface.

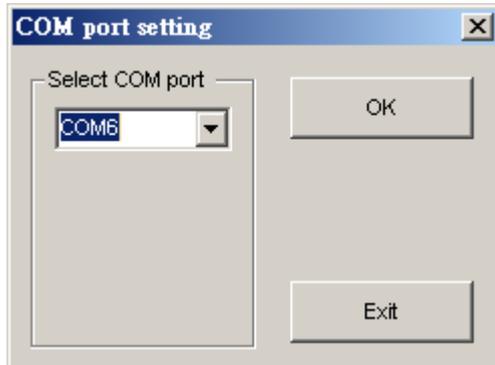
### **Start AgileCon under PC mode**

1. Attach the appropriate cable to an available RS232 serial port or USB port.
2. Plug the other end of the cable into the RS232 serial port or USB port on the reader
3. Plug all power cords into electrical outlets
4. Power on AMPR-750, if AMPR-750 is in standalone mode, power off while pressing "Option" button to switch to PC mode
5. Configure the communication COM port between AMPR-750 and the PC

### **Setup Connection between AgileCon and the PC**

1. Ensure AgileCon is connected to the computer.
2. Ensure on the AgileCon LCD shows is in PC mode
3. Ensure the COM port setting is  
Baud rate= 57600  
Data bits= 8 bits  
Parity check= no  
Stop bits= 1  
Flow control=no
4. Go to start → program files→ ACTGene→AgileCon to execute the AgileCon software
5. After executing AMPR-750, the PC will show the startup screen with the software version of the AgileCon.
6. In the initial setup, the AgileCon will scan all available ports, if there is no response from the AgileCon, the AgileCon will show off-line.

7. Select the desired COM port for the communication between the PC and AMPR-750 (Currently the AgileCon supports COM 1~COM16).



8. Press OK on the AgileCon to start communication between AMPR-750 and AgileCon
9. Press Init on the tool bar of AgileCon. The AgileCon will use the desired COM port and send a signal to the AgileCon. If the AMPR-750 responds to the LCD, the AgileCon will show ON LINE.

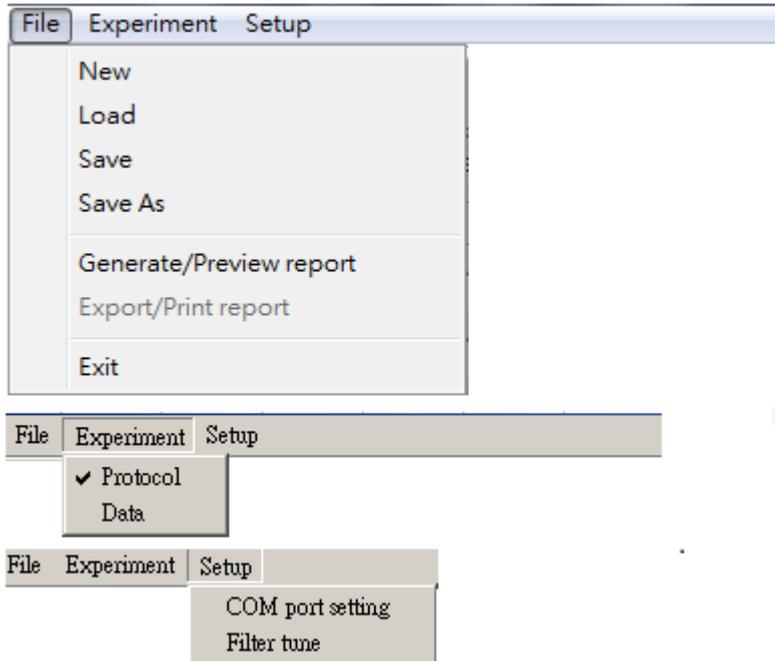
### **Setting up USB connection Between AMPR-750 and AgileCon**

1. On AMPR-750 standalone mode go to SETUP→COMPUTER
2. Change the RS232 to USB
3. Power on the AMPR-750 again while pressing option button on the instrument to switch to the PC mode (Appendix A for USB setting)

## Main Menu Configuration

### Graphic User Interface

The graphic user interface will have the function menu, tool bar, message, status (Temp. connection status), and working area (Protocol, and data)



### File menu functions

Under the main menu of the AgileCon, there are four options, Files, Experiment, Setup, and Version.

1. Load: Load experiment file

When loading, exp, file, AgileCon SW will check....

2. Save: Save experiment file

3. Save As: Save experiment file using different file name

4. Close: Close experiment file

5. Generate/Preview report: Generate report after experiment is done, must generate report first before saving to Excel

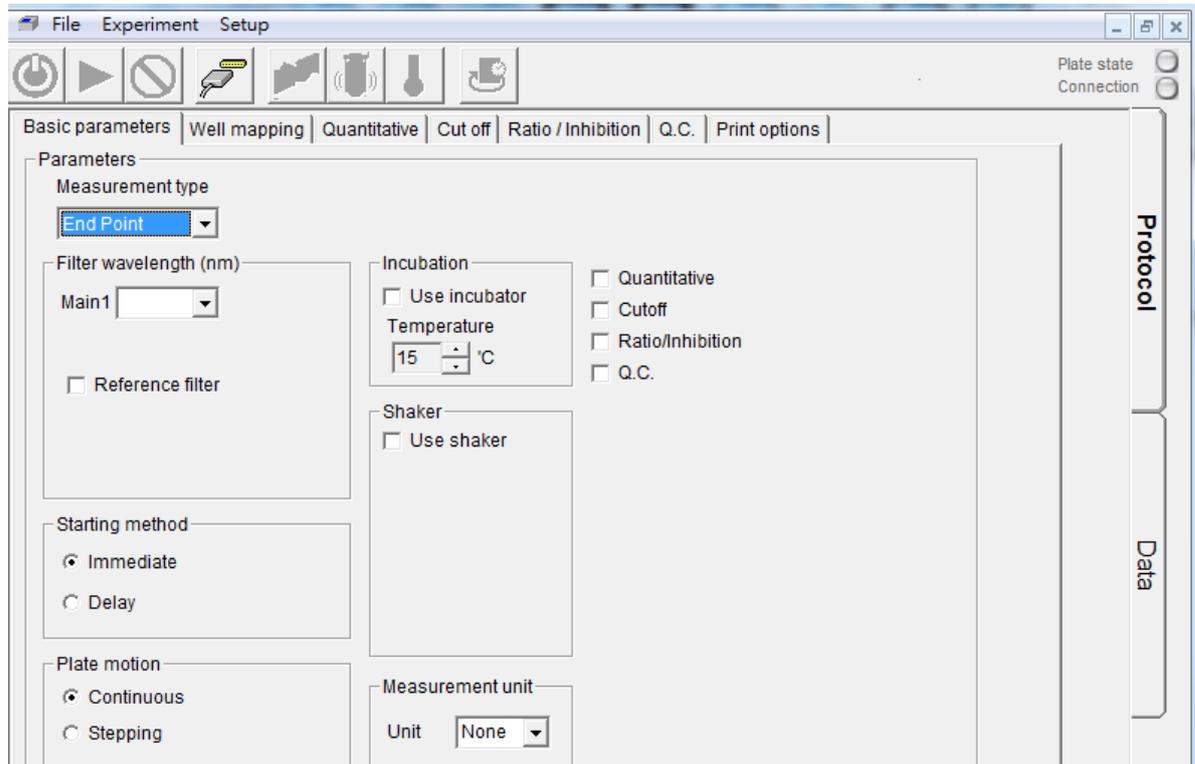
6. Export/Print report: To export to excel or to Print report using the printer connected to the PC

7. Exit: Exit the AgileCon

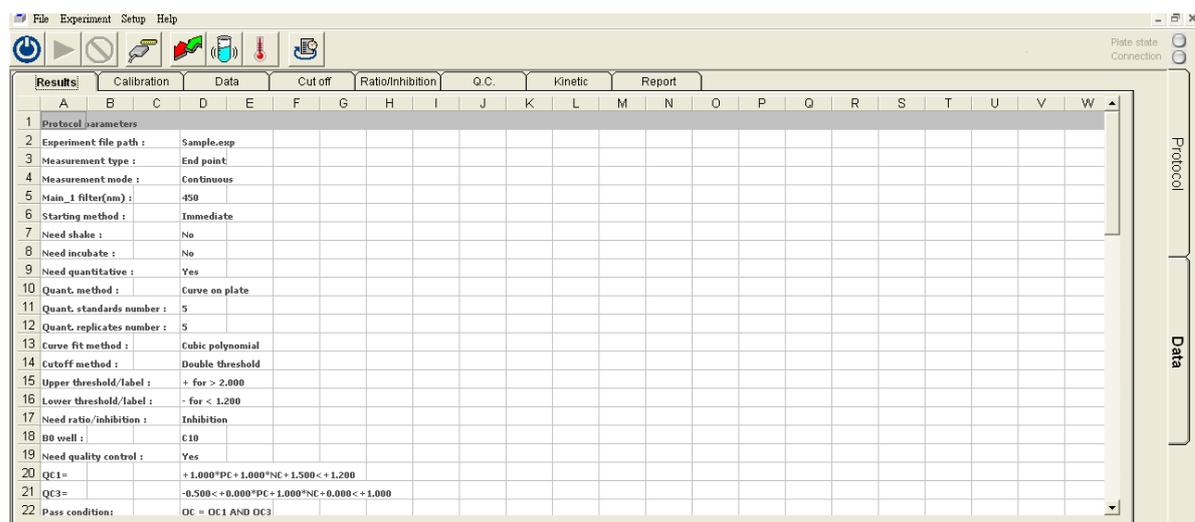
## Experiment menu functions

There are 2 functions under the experiment menu, Protocol and Data. Protocol is to setup the parameters of a experiment, and data is to show the results of an experiment.

1. Protocol: To setup the Parameters, Well mapping, Quantitative, Cutoff, Ratio/Inhibition. Q.C, and print options of a experiment



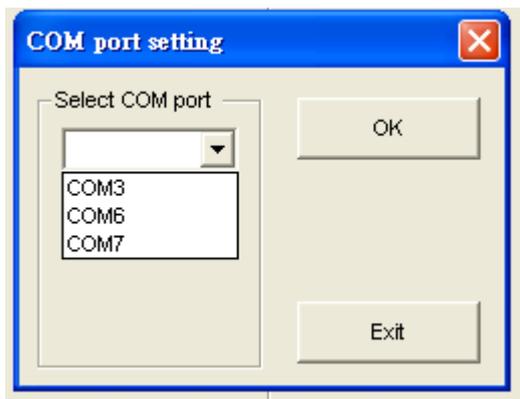
2. Data: To show the result of an experiment



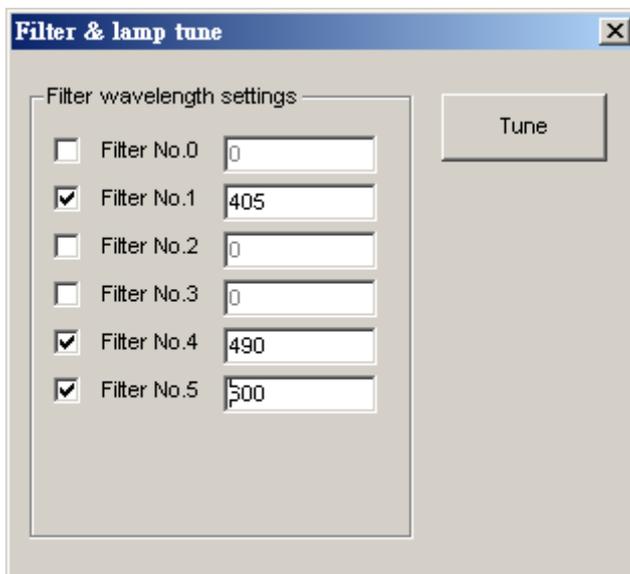
## Setup menu functions

The setup menu is used for COM port configuration and filter setting. The AgileCon can setup up to 8 filters

1. COM port setting: User can change the desire COM port to communicate between AMPR-750 and AgileCon. AMPR-750 will automatically detect all available COM port on the PC



2. Filter tune: The AgileCon has one 8 slot filter wheel for the users to install filters. After installing new filters on the AMPR-750, it is important to set the correct filter wavelength on the AgileCon. Check the check box on the left to enter desired wavelength for the filter, and press the Tune key after the desired wavelength is entered.



## Tool Bar Menu Configuration

There are Init, Execute, Stop, COM port setting, Plate In/Out, Shaker, Incubator, and post processing tabs on the tool bar menu

1. Init tab: After connecting AMPR-750 and AgileCon, users must initialize first before any changes can be made



2. Exec tab: To execute the desired parameters for the experiment



3. Stop tab: To stop the current action for the AMPR-750



4. COM port setting: To setup the COM port connection between the PC and the AgileCon.



5. Plate in/out: To open/close the plate, the plate status will show on the status bar

6. Shaker: The shaker tap is used to configure the shaker. The shaker has 3 speeds, low (8Hz), Medium(11Hz), High (14Hz)



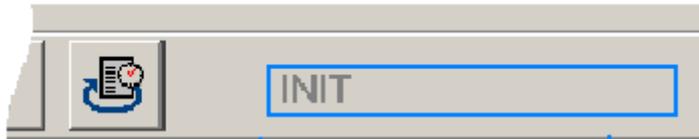
7. Incubator: To initialize the incubator, users can configure the incubator from ambient + 3~50 °C



8. Post Processing: Use the parameters on the main manual and refresh the data



9. Message: Shows the status and messages from AMPR-750.



Message	Description
INIT	Initializes the AMPR-750
INIT PASS	Initialization successful, and can start working
OFF LINE	AMPR-750 and AgileCon is off line
ON LINE	AMPR-750 and AgileCon is on line
STOP	Stop current action for AMPR-750
PLATE MOVE	The plate of AMPR-750 is moving
PLATE IN	The plate is in AMPR-750
PLATE OUT	The plate is out of AMPR-750
EXEC ENTRY	Confirm and retry execution
EXECTION	Start execution the parameters
EXEC...Pn	Execute plate n is the plate number
FILTER TUNE	Start tuning filter
TUNE PASS	Filter tuning success
SHAKER CTRL	Execute shaker
SHAKER DONE	Shaking done
TEMP CTRL	Execute Temp. control
DETECT	Detect AMPR-750 restart

10. Temperature monitor: To monitor the incubator temperature within AMPR-750



Status monitor: To monitor the status of AMPR-750. After initialization, there will be two lights showing on the status monitor. Red/Green represent plate is Out/In. Blue/Grey represent connection status between AMPR-750 and AgileCon

## Defining Parameters for Experiment

### Defining Parameters

When starting experiment users must first define the parameters such as wavelength, reading method, incubator, and shaking. In addition, users can also define the calculation such as Quantitative, Cutoff, Ratio/Inhibition, and QC.

1. Measurement Type: Users can define 3 types of measuring types. End point, two point, and Kinetic.

The screenshot displays the 'Basic parameters' configuration window. The 'Measurement type' dropdown menu is open, with 'Two Points' selected. The 'Incubation' section includes a 'Use incubator' checkbox (unchecked), a 'Temperature' field set to 15 °C, and four checked checkboxes: 'Quantitative', 'Cutoff', 'Ratio/Inhibition', and 'Q.C.'. The 'Shaker' section has a 'Use shaker' checkbox (checked), 'Speed' set to 'Low(8Hz)', and 'Time' set to 1 sec. The 'Starting method' section has 'Immediate' selected. The 'Plate motion' section has 'Continuous' selected. The 'Measurement unit' dropdown is open, showing a list of units including 'mg/dL' (selected), 'G/dL', 'U/L', 'G/L', 'ug/dL', 'ABS', 'mg/dL', 'OD', 'mABS', 'U/mL', 'ug/mL', 'mEq/L', 'mmol/L', 'umol/L', and 'ng/mL'. The 'Two point interval' is set to 5 sec.

a、End Point

Parameters

Measurement type  
 End Point

Filter wavelength (nm)

	Previous	Current
Main1	450	405
Ref.1	0	490

Reference filter

Starting method

Immediate

Delay 0 sec.

Plate motion

Continuous

Stepping 0 ms

Incubation

Use incubator

Temperature 15 °C

Quantitative

Cutoff

Ratio/Inhibition

Q.C.

Shaker

Use shaker

Speed

Low(8Hz)

Medium(11Hz)

High(14Hz)

Time 1 sec.

Measurement unit

Unit None

b、Two Points

Parameters

Measurement type  
 Two Points

Filter wavelength (nm)

	Previous	Current
Main1	450	405
Main2	450	405
Ref.1	450	490
Ref.2	450	600

Reference filter

Starting method

Immediate

Delay 0 sec.

Plate motion

Continuous

Stepping 0 ms

Incubation

Use incubator

Temperature 15 °C

Quantitative

Cutoff

Ratio/Inhibition

Q.C.

Shaker

Use shaker

Speed

Low(8Hz)

Medium(11Hz)

High(14Hz)

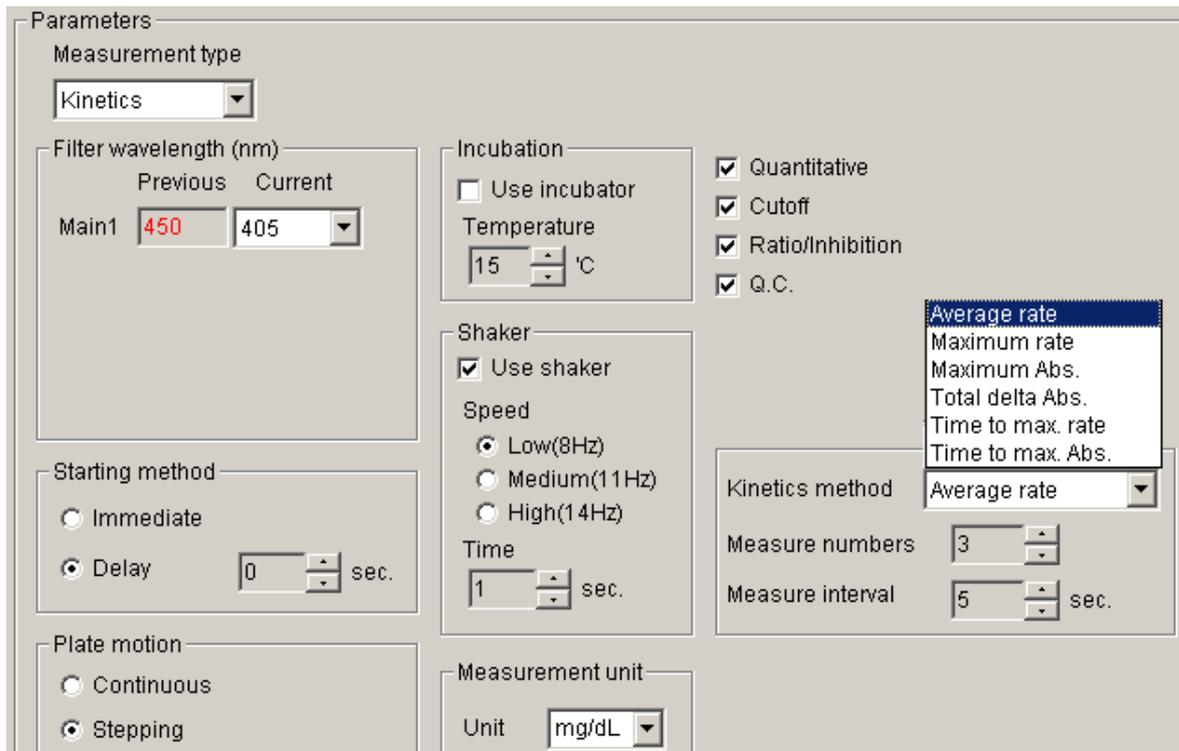
Time 1 sec.

Two point interval 7 sec.

Measurement unit

Unit mg/dL

- c、 Kinetics: Kinetics measuring method can only select main filter and no reference filter

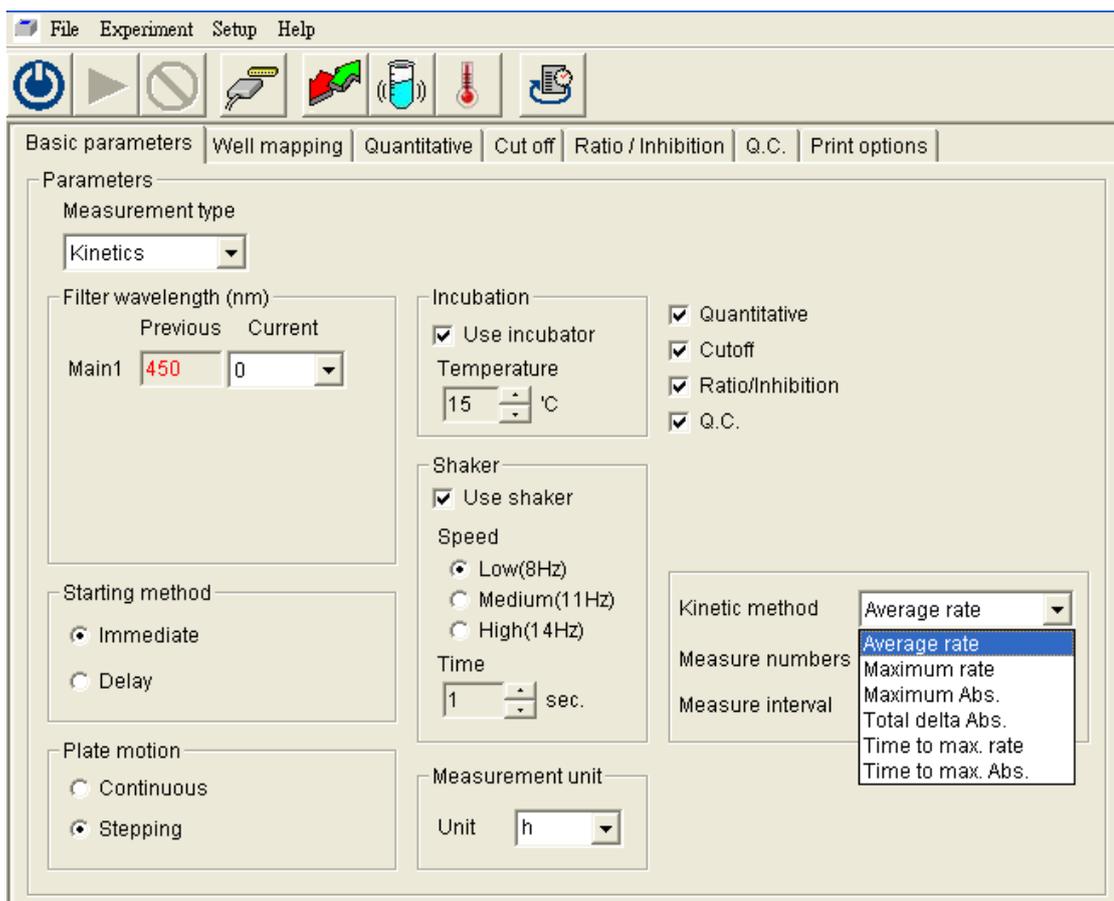


2. Filter wavelength: Users will need to select the filter wavelength for the desired experiment. In addition, users can also select a reference wavelength. AMPR-750 will automatically calculate the Delta OD as for difference between the main and reference filters.
3. Starting method: Define when to start the defined experiment parameters
  - a、 Immediate: Start right after pressing the execute tab
  - b、 Delay: Users can define from 0~999s delay to start
4. Plate motion: To define how the plate motion when measuring
  - a、 Continuous: When measuring the plate is in continuous motion and not stopping
  - b、 Stepping: User can define the stop time when measuring from 0~999 ms (In kinetic mode there is no stepping time)
5. Incubation: Users can define the incubator temperature by clicking the incubation tab. AMPR-750 incubator can save the temperature from +3~50°C

6. Shaker: The shaker on AMPR-750 can select 3 types of speed, and the shaking time can range from 0~999s

Speed	Description
High	14 Hz
Medium	11Hz
Low	8Hz

7. Measurement unit: Users can select 15 types of measurement unit "None", "G/dL", "U/L", "G/L", "ug/dL", "ABS", "mg/dL", "OD", "mABS", "U/mL", "ug/mL", "mEq/L", "mmol/L", "umol/L", "ng/mL". When select to None user can enter the desired measurement unit
8. Two point interval: Users can select the 2 point interval from 5~999s
9. Kinetic method, numbers, and interval: When user select kinetic measurement user can select the method, numbers, and interval.



- a、 Kinetic method: Users can select Average rate, Maximum rate, Maximum OD, Total delta OD, Time to max slope, Time to max OD.

- b · Measure number: User can enter the measuring numbers of the plate from 3~30 times
- c · Measure interval: User can select the measure interval. When plate motion is in Continuous from 4~500s, in Stepping 5~500s

## Well Mapping

1. Save and load map layout: Users can load their map layout by pressing the folder under map layout or the disk icon to save under map layout

The screenshot shows the 'Well mapping' interface with a 12x8 grid. The grid contains various well types and concentrations. A context menu is open over well B3, and another is open over well G3. Below the grid, there are controls for 'Type', 'Name', 'Conc.', 'Fill direction', 'Replicate direction', 'Fill number', and 'Replicate number'.

2. Well mapping method:
  - a · Select the type well users would like to define (Blank, Positive, Negative, Sample, Standard). Users can also enter the concentration value for the standard.
  - b · Determine where on the well the well type needs to be, and left click on the position on the well
  - c · Right click on the mouse to select the fill option.
3. Fill and replicate direction rule: Row is to fill or replicate the well vertically, column is to fill or replicate the well horizontally.

4. Fill and replicate well rules:

- a. Fill number: Is to replicate the number of different samples
- b. Replicate number: Is to replicate the sample how many times on the well plate.

Example: of filling and replicate the well plate

	1	2	3	4	5	6	7
A		Start location	Sample x 2				
B			1-1	2-1			
C			1-2	2-2			
D			1-3	2-3			
E			1-4	2-4			
F							
G							

Diagram illustrating well plate filling and replication. A 7x7 grid is shown. A 'Start location' is marked at well B2. A 'Column' is indicated by a blue arrow pointing down from B2. A 'Row' is indicated by a pink arrow pointing right from B3. 'Sample x 2' is shown as two columns (3 and 4) starting from B3. 'Replicate x 4' is shown as four rows (B, C, D, E) for each of the two samples.

	1	2	3	4	5	6	7	8	9	10	11	12
A												
B									1-1	1-2	1-3	2-1
C	2-2	2-3	3-1	3-2	3-3						✓ detour	
D											↔	
E		1-1	1-2	2-1								
F			✗ blocked									
G											✗ over range	
H									1-1	1-2	1-3	2-1

Diagram illustrating well plate filling and replication with various annotations. A 12x8 grid is shown. A grey shaded area covers wells E5-F6. Annotations include: 'detour' (red checkmark and arrows) at C11; 'blocked' (red X) at F3; 'over range' (red X) at G11. Sample patterns are shown in pink boxes: B9-12, C1-5, E2-4, and H9-12.

5. Blank, POS, and NEG can only have 1 set within AgileCon

6. STD can configure 1~15 set, a maximum of 96

7. Sample max of 96

8. Types of well:

- a. BLK: User can define BLK for the blank well, and are defined as a light green on the well plate
- b. POS: Users can define positive control on the well plate, and are defined as a light red on the well plate
- c. NEG: Users can define negative control on the well plate, and are defined as a light blue on the well plate

- d、 Sample: Users can define the sample on the well plate , and are defined as an light orange on the well plate
- e、 Standard: Users can define the standard on the well plate, and are defined as a light purple on the well plate. Users can fill in the value of 0.001~999999.999

File Experiment Setup Help

Basic parameters Well mapping Quantitative Cut off Ratio / Inhibition Q.C. Print options

Map layout

Select type first then assign location to fill.

	1	2	3	4	5	6	7	8	9	10	11	12
A	Z 1-1 BLK01	Z 1-2 BLK01	Z 1-3 BLK01	Z 1-4 BLK01	Z 1-5 BLK01							
B	P 1-1 POS01	P 1-2 POS01	P 1-3 POS01	P 1-4 POS01	P 1-5 POS01							
C	N 1-1 NEG01	N 1-2 NEG01	N 1-3 NEG01	N 1-4 NEG01	N 1-5 NEG01							
D	T 1-1 SAM01	T 1-2 SAM01	T 1-3 SAM01	T 1-4 SAM01	T 1-5 SAM01							
E	C 1-1 STD01	C 1-2 STD01	C 1-3 STD01	C 1-4 STD01	C 1-5 STD01							
F												
G												
H												

Type Standard

Name STD02

Conc. 1.000

Fill direction  
 Row  
 Column

Replicate direction  
 Row  
 Column

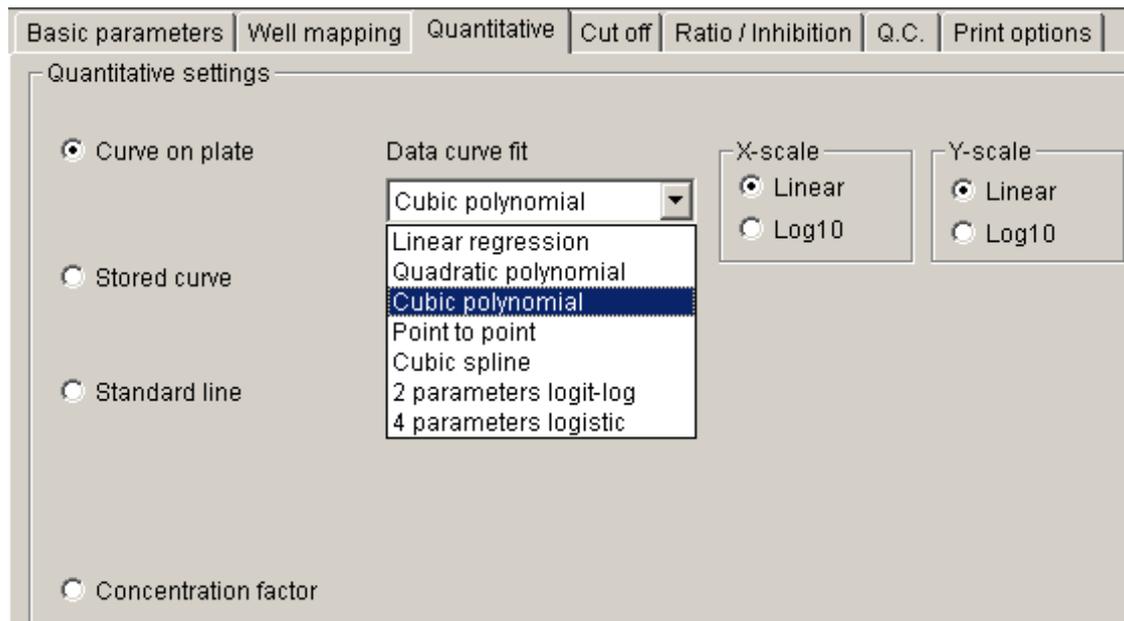
Fill number 1

Replicate number 5

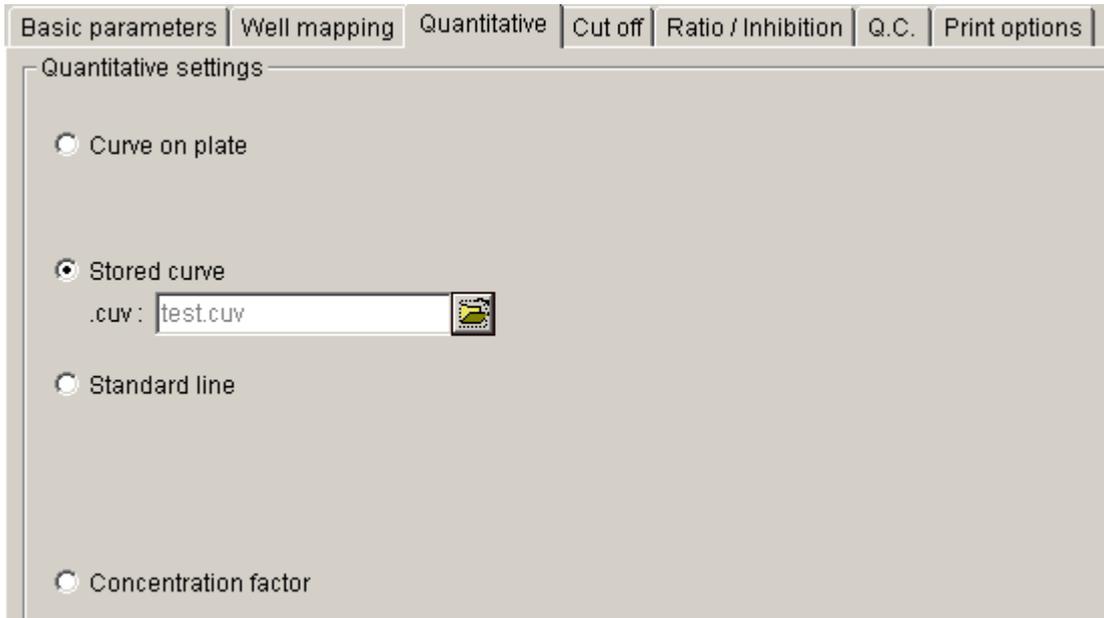
## Quantitative measuring method

AMPR-750 supports 4 types of Quantitative method, Curve on plate, Stored curve, Standard line, and Concentration factor.

1. Curve on plate: Uses the standard on the well plate for the calibration curve. There are 7 types of curve fitting on the AgileCon
  - a、 Linear regression
  - b、 Quadratic polynomial
  - c、 Cubic polynomial
  - d、 Point to point
  - e、 Cubic spline
  - f、 2 parameters logit-log
  - g、 4 parameters logistic



2. Stored curve: Users can load their existing stored curve for quantitative, the stored curve are under AgileCon\StdCurve, file name is .cuv



Basic parameters | Well mapping | Quantitative | Cut off | Ratio / Inhibition | Q.C. | Print options

Quantitative settings

Curve on plate

Stored curve  
 .cuv:  

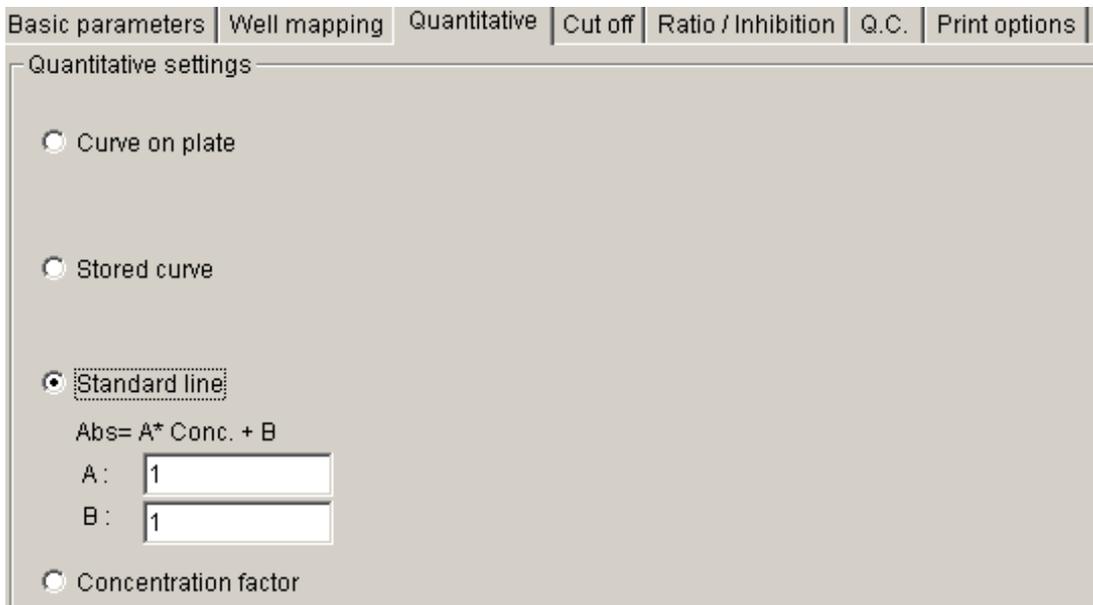
Standard line

Concentration factor

3. Standard line: User can use the  $Abs=A* Conc+B$  equation and enter the value of A and B to calculate a standard line.

The Value of A can be : -999999.999 ~ +999999.999

The value of B can be : -999999.999 ~ +999999.999



Basic parameters | Well mapping | Quantitative | Cut off | Ratio / Inhibition | Q.C. | Print options

Quantitative settings

Curve on plate

Stored curve

Standard line  
 $Abs= A* Conc. + B$   
 A:   
 B:

Concentration factor

4. Concentration factor: User can enter a factor for calculate the concentration  
The value of F can be : -999999.999 ~ +999999.999

Basic parameters	Well mapping	Quantitative	Cut off	Ratio / Inhibition	Q.C.	Print options
------------------	--------------	--------------	---------	--------------------	------	---------------

Quantitative settings

Curve on plate

Stored curve

Standard line

Concentration factor

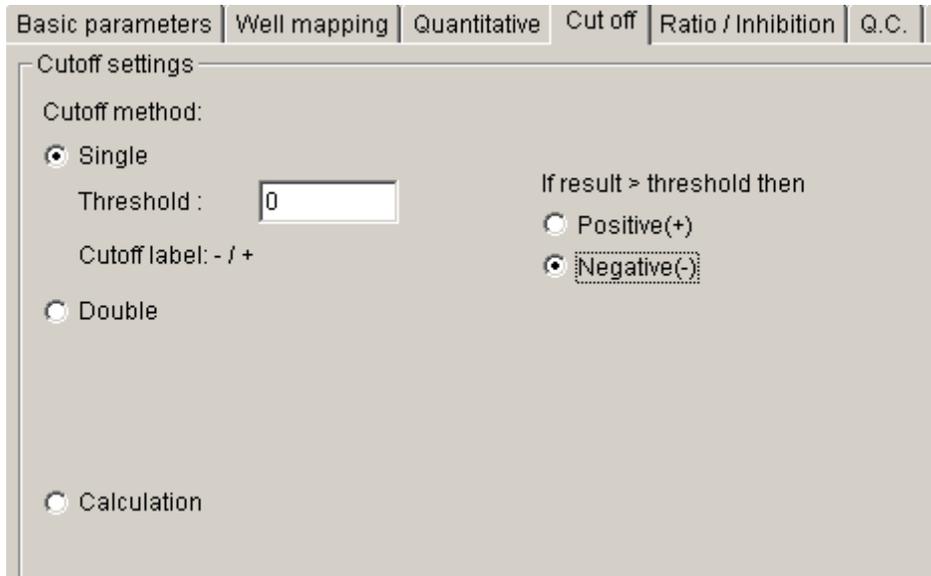
Conc. = F \* Abs

F:

## Cutoff measuring method

AMPR-750 supports 3 types of Cutoff measuring methods.

1. Single cutoff method: User can enter a threshold of 0.0000~4.0000, and define the result is positive or negative.



Basic parameters | Well mapping | Quantitative | **Cut off** | Ratio / Inhibition | Q.C. | I

Cutoff settings

Cutoff method:

Single

Threshold :

Cutoff label: - / +

Double

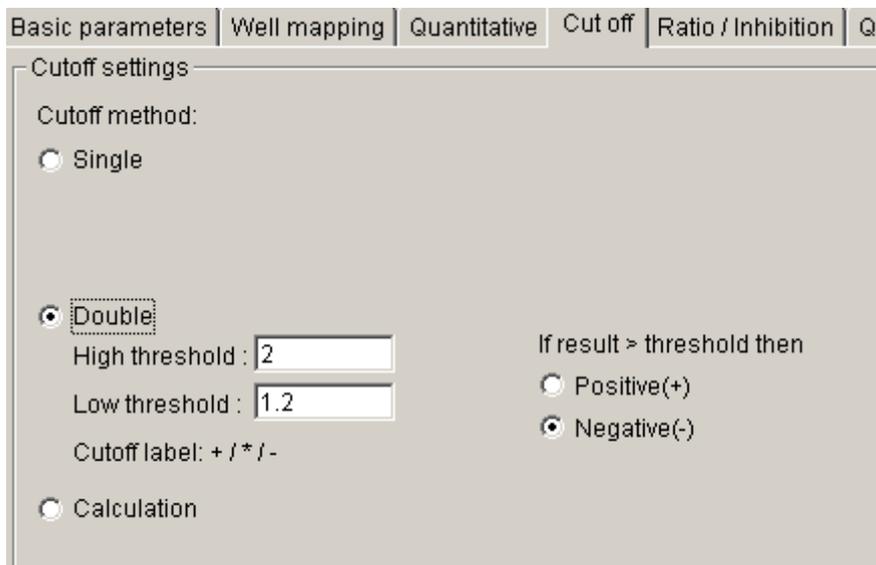
Calculation

If result > threshold then

Positive(+)

Negative(-)

2. Double cutoff method: Users can define the high and low threshold. The high and low value can be from 0.0000~4.0000. The AgileCon can determine the positive, negative results and between (\*)



Basic parameters | Well mapping | Quantitative | **Cut off** | Ratio / Inhibition | Q.

Cutoff settings

Cutoff method:

Single

Double

High threshold :

Low threshold :

Cutoff label: + / \* / -

Calculation

If result > threshold then

Positive(+)

Negative(-)

3. Calculation cutoff method: Users can create a maximum of 4 formulas as the threshold calculation and make the result as 5 groups.

Every formula can be calculated from the positive or negative control results with the equation:

$$EQ_n = a * PC + b * NC + c$$

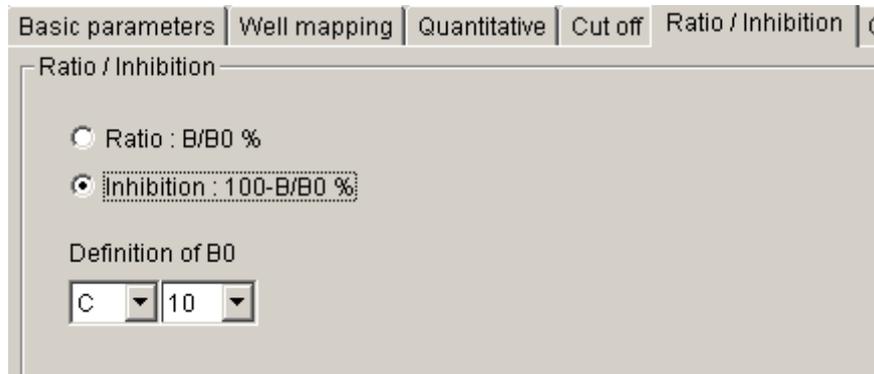
The value for a, b and c can be -1000.000 ~ +1000.000

Example: With four threshold the threshold higher then EQ1 as default ( ++ ), Between EQ1 and EQ2 (+). Between EQ2 and EQ3 is (\*). Between EQ3 and EQ4 is (-). Below EQ 4 is (--)

Basic parameters	Well mapping	Quantitative	Cut off	Ratio / Inhibition	Q.C.	Print options
Cutoff settings						
Cutoff method:						
<input type="radio"/> Single						
<input type="radio"/> Double						
<input checked="" type="radio"/> Calculation						
Calculate number		<input type="text" value="4"/>	<input checked="" type="checkbox"/> Reverse			
Label of all limits :						
EQ1 = a*PC + b*NC + c	a :	<input type="text" value="1"/>	b :	<input type="text" value="1"/>	c :	<input type="text" value="1"/>
EQ2 = a*PC + b*NC + c	a :	<input type="text" value="1"/>	b :	<input type="text" value="1"/>	c :	<input type="text" value="1"/>
EQ3 = a*PC + b*NC + c	a :	<input type="text" value="1"/>	b :	<input type="text" value="1"/>	c :	<input type="text" value="1"/>
EQ4 = a*PC + b*NC + c	a :	<input type="text" value="1"/>	b :	<input type="text" value="1"/>	c :	<input type="text" value="1"/>
						>EQ1: --
						EQ1~EQ2: -
						EQ2~EQ3: *
						EQ3~EQ4: +
						<=EQ4: ++

## Ratio/Inhibition Calculation Method

Select a B0 as a standard value to calculate the rest of the well plate Bn



### 1. Ratio/Inhibition operating procedure

- a 、 definition: Ratio =  $(B_n/B_0)\%$
- b 、 Inhibition =  $100\% - (B_n/B_0)\%$
- c 、 Must have sample on B0 position or the AgileCon will show error
- d 、 Please check if B0 is a replicate of the sample, if there are many replicate of the sample the B0 will be the average of the replicates of the sample.
- e 、 If B0 value is 0 then the AgileCon will show error
- f 、 If ratio is over 200% then the AgileCon will show HI, lower, then -200%, then the AgileCon will show LO
- g 、 Ratio is represent as blue
- h 、 Inhibition represent as red

## Q.C. Calculation Method

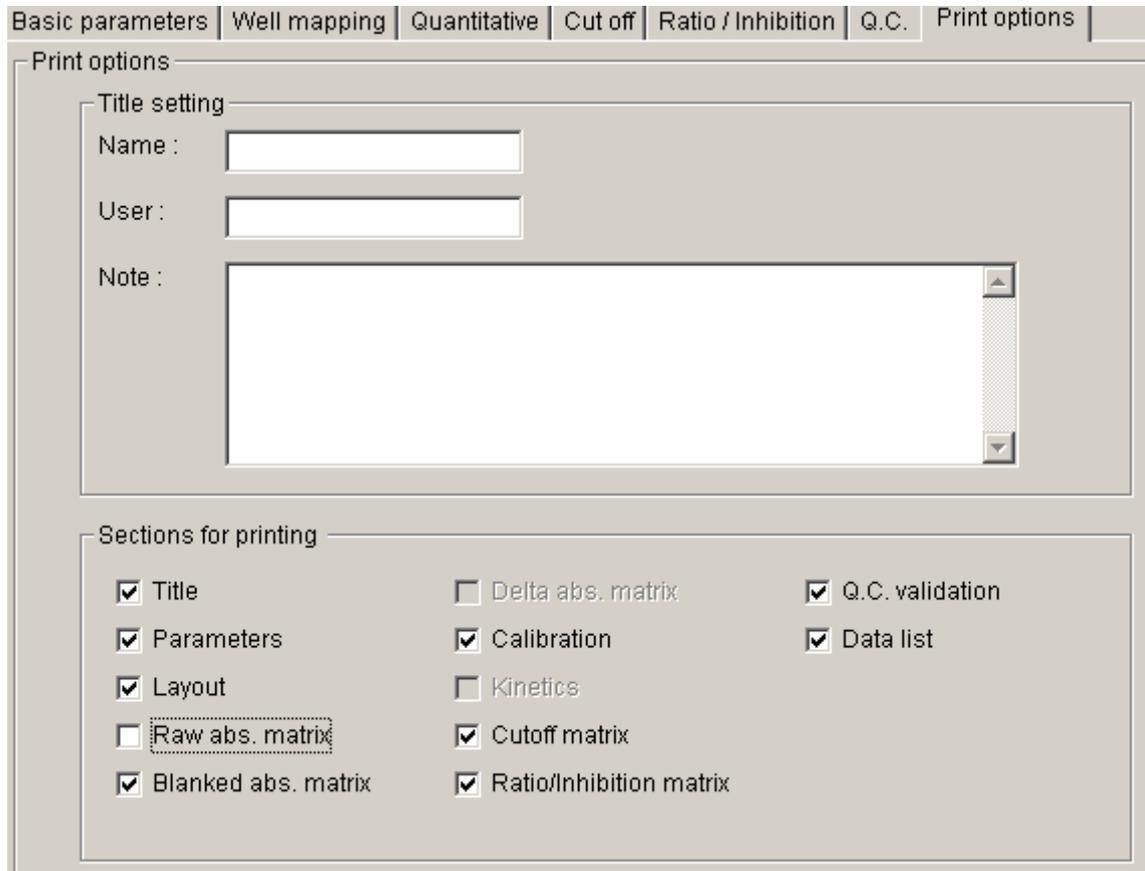
The criteria of the QC calculation can be used to determine the reliability of this experiment.

1. Can use a maximum of 4 equations for calculation, all of the calculation results are considered to determine pass or fail of the QC calculation method.
2. The value of a can be -1000.000 ~ +1000.000
3. The value of b can be -1000.000 ~ +1000.000
4. The value of c can be -1000.000 ~ +1000.000
5. The value of H can be -9999999.999 ~ +9999999.999
6. The value of L can be -9999999.999 ~ +9999999.999
7. To determine pass or fail the equation uses a OR, AND, XOR to determine

Basic parameters	Well mapping	Quantitative	Cut off	Ratio / Inhibition	Q.C.	Print options
Q.C.						
General equation : $L \leq aPC + bNC + c \leq H$						
	L	a	b	c	H	
<input checked="" type="checkbox"/>	QC1 :	N/A	1	*PC+	1	*NC+ 1.5 <= 1.2
<input checked="" type="checkbox"/>	QC2 :	0	<	1	*PC+	1 *NC+ 0 N/A
<input checked="" type="checkbox"/>	QC3 :	-0.5	<=	0	*PC+	1 *NC+ 0 <= 1
<input type="checkbox"/>	QC4 :					
Pass condition : ( if QC=true then PASS )						
QC = QC1 OR QC2 AND QC3						

## Printing options

Users can set Name, User, and Note to differentiate different experiment reports. Users can also check the boxes next to the sections for printing Column to determine which data users will need to show on the report.



Basic parameters | Well mapping | Quantitative | Cut off | Ratio / Inhibition | Q.C. | **Print options**

Print options

Title setting

Name :

User :

Note :

Sections for printing

<input checked="" type="checkbox"/> Title	<input type="checkbox"/> Delta abs. matrix	<input checked="" type="checkbox"/> Q.C. validation
<input checked="" type="checkbox"/> Parameters	<input checked="" type="checkbox"/> Calibration	<input checked="" type="checkbox"/> Data list
<input checked="" type="checkbox"/> Layout	<input type="checkbox"/> Kinetics	
<input type="checkbox"/> Raw abs. matrix	<input checked="" type="checkbox"/> Cutoff matrix	
<input checked="" type="checkbox"/> Blanked abs. matrix	<input checked="" type="checkbox"/> Ratio/Inhibition matrix	

1. Title: The title of the experiment
  2. Parameters: Shows the protocol parameters of the experiment
  3. Layout: The well plate layout of the experiment
  4. Raw abs. matrix: The OD value from the AMPR-750
  5. Blanked abs. matrix: The OD value minus the blank
  6. Delta abs. matrix: The delta OD curve
  7. Calibration: The calibration value
  8. Kinetics: Kinetics value for the experiment
  9. Cutoff matrix: Cutoff report
  10. Ratio/Inhibition matrix: Ratio/Inhibition report
  11. Q.C. validation: QC report
  12. Data list: Show the data list
- (Matrix show as well mapping configuration)

## Interpreting the results

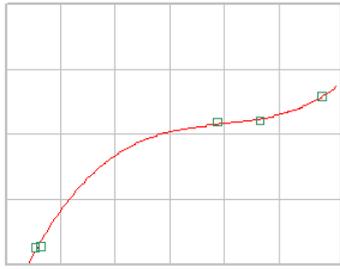
The AgileCon will generate the results after every experiment in the data tab on the right. Users can use to result, Calibration, Data, Cutoff, Ratio/Inhibition, Q.C, Kinetic to view their experiment results

Result : Click on the result tab to see the parameter setup, plate layout, Raw OD, and Con Matrix of the experiment. If check Quantitative, cutoff, Ratio/Inhibition , QC calculation method the criteria of the calculation method will also show on this page.

Results	Calibration			Data		Cut off		Ratio/Inhibition		Q.C.	Kinetic		Report	
	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Protocol parameters													
2	Experiment file path :			Sample.exp										
3	Measurement type :			End point										
4	Measurement mode :			Continuous										
5	Main_1 filter(nm) :			450										
6	Starting method :			Immediate										
7	Need shake :			No										
8	Need incubate :			No										
9	Need quantitative :			Yes										
10	Quant. method :			Curve on plate										
11	Quant. standards number :			5										
12	Quant. replicates number :			5										
13	Curve fit method :			Cubic polynomial										
14	Cutoff method :			Double threshold										
15	Upper threshold/label :			+ for > 2.000										
16	Lower threshold/label :			- for < 1.200										
17	Need ratio/inhibition :			Inhibition										
18	B0 well :			C10										
19	Need quality control :			Yes										
20	QC1=			+1.000*PC+1.000*NC+1.500<+1.200										
21	QC3=			-0.500<+0.000*PC+1.000*NC+0.000<+1.000										
22	Pass condition:			QC = QC1 AND QC3										
23														
24	Plate layout													
25		1	2	3	4	5	6	7	8	9	10	11	12	
26	A	SAM01-1	SAM02-1	SAM03-1	SAM04-1	SAM05-1	SAM06-1	SAM07-1	SAM08-1	SAM09-1	SAM10-1	SAM11-1	SAM12-1	
27	B	SAM01-2	SAM02-2	SAM03-2	SAM04-2	SAM05-2	SAM06-2	SAM07-2	SAM08-2	SAM09-2	SAM10-2	SAM11-2	SAM12-2	
28	C	SAM01-3	SAM02-3	SAM03-3	SAM04-3	SAM05-3	SAM06-3	SAM07-3	SAM08-3	SAM09-3	SAM10-3	SAM11-3	SAM12-3	
29	D	...	...	...	POS01-1	STD01-1	STD02-1	STD03-1	STD04-1	STD05-1	...	...	...	
30	E	...	...	...	POS01-2	STD01-2	STD02-2	STD03-2	STD04-2	STD05-2	...	...	...	

Calibration : When Quantitative is checked in the protocol, calibration curve will be displayed according to the setting parameter.

Results	Calibration			Data	Cut off	Ratio/Inhibition	Q.C.	Kinetic	Report						
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	
23	Calibrators :			Calib. curve :											
24	Name	Meas.	Conc.	Fit type :			cubic polynomial								
25	C01	STD01	0.159	Meas. scale :			linear								
26			0.095	Conc. scale :			linear								
27			0.118												
28			0.120												
29			0.165	ABS.											
30			0.132	120.000	2										
31	C02	STD02	0.144												
32			0.105												
33			0.139												
34			0.120												
35			0.204												
36			0.142	145.000											
37	C03	STD03	1.102												
38			1.051												
39			1.123												
40			1.057	0											
41			1.119	0											
42			1.090	1000.000	Formula :			1575 Conc.							
43	C04	STD04	1.119	ABS = a0 + a1*C + a2*C*C + a3*C*C*C											
44			1.071	a0 : -2.954E-1											
45			1.085	a1 : 3.712E-3											
46			1.062	a2 : -3.476E-6											
47			1.183	a3 : 1.137E-9											
48			1.104	1200.000											
49	C05	STD05	1.262												
50			1.229												
51			1.252												
52			1.332												



Layout : Shows the well mapping layout of the plate. Different types of well uses a different color to represent.

Source data : Shows the source data for the quantitative measurement.

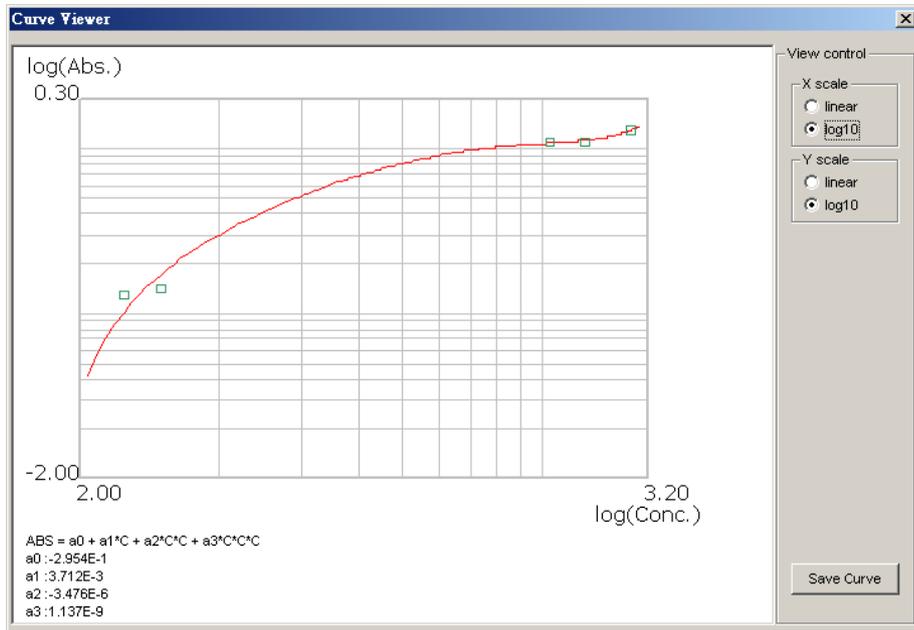
- In end point measurement ,if there is no reference filter then the main filter (M1) data is the source data. If there is reference filter then M1 – R1 is the source data.
- In Two points measurement if there is no reference filter the source data will be M1
- In Two points measurement if there is reference filter then the source data will be D1=M1-R1
- During Kinetic measurement user cannot use reference filter, the M1 data will be the source data

Calibrators : Will use C01~C15 to represent every STD's name, and OD value, and will show the average measurement and the standard Conc value

Calib Curve : When using standard curve (Curve on plate or stored curve), will use curve fitting to create a standard curve.

Residuals table : Will use C01~C15 to show standard OD value (C set), Average Abs, and Concentration and Residual (Ccal-Cset)

Curve Viewer : User can double click on the curve to enable the curve viewer. User can also store the curve in the save curve tab on the bottom. The default stored curve are in AgileCon\StdCurve



Data sheet : According to the well plate mapping, the AgileCon will display all the result. The data sheet will show Name, Well ID, Replicate numbers, Abs, SD, CV%, Conc, Measuring unit, Cutoff, and Inhibition %. The average of every value will display a \_avg next to the well ID.

Results	Calibration	Data	Cut off	Ratio/Inhibition	Q.C.	Kinetic	Report		
Name	Well	Replicate	Abs.	SD	CV%	Conc.	Unit	Cutoff	Inhibt%
<b>POS. CONTROLS</b>									
POS01	D4	1	0.022	---	---	---	---	---	---
POS01	E4	2	-0.039	---	---	---	---	---	---
POS01_avg	---	---	-0.009	0.031	LO	83.513	mg/dL	---	100.43
<b>NEG. CONTROLS</b>									
NEG01	G4	1	0.032	---	---	---	---	---	---
NEG01	H4	2	0.115	---	---	---	---	---	---
NEG01_avg	---	---	0.074	0.042	56.46	110.217	mg/dL	---	96.33
<b>SAMPLES</b>									
SAM01	A1	1	-0.036	---	---	---	---	---	---
SAM01	B1	2	-0.112	---	---	---	---	---	---
SAM01	C1	3	-0.100	---	---	---	---	---	---
SAM01_avg	---	---	-0.083	0.033	-40.35	60.594	mg/dL	---	104.13
SAM02	A2	1	-0.029	---	---	---	---	---	---
SAM02	B2	2	-0.071	---	---	---	---	---	---
SAM02	C2	3	-0.014	---	---	---	---	---	---
SAM02_avg	---	---	-0.038	0.024	-63.49	74.405	mg/dL	---	101.90
SAM03	A3	1	0.006	---	---	---	---	---	---
SAM03	B3	2	-0.003	---	---	---	---	---	---
SAM03	C3	3	0.010	---	---	---	---	---	---
SAM03_avg	---	---	0.004	0.005	125.46	87.650	mg/dL	---	99.78
SAM04	A4	1	0.120	---	---	---	---	---	---
SAM04	B4	2	0.048	---	---	---	---	---	---
SAM04	C4	3	0.041	---	---	---	---	---	---
SAM04_avg	---	---	0.070	0.036	51.25	108.879	mg/dL	---	96.52
SAM05	A5	1	0.280	---	---	---	---	---	---
SAM05	B5	2	0.167	---	---	---	---	---	---
SAM05	C5	3	0.158	---	---	---	---	---	---
SAM05_avg	---	---	0.202	0.056	27.53	155.127	mg/dL	---	89.92
SAM06	A6	1	0.292	---	---	---	---	---	---
SAM06	B6	2	0.222	---	---	---	---	---	---
SAM06	C6	3	0.159	---	---	---	---	---	---
SAM06_avg	---	---	0.224	0.054	24.21	163.676	mg/dL	---	88.78

Cutoff results : When clicking the cutoff box and finished the configuration, AMPR-750 will show the cutoff results according to the well mapping. Depends on the conditions there will be max 5 symbols to interoperate the cutoff results

{ ++ } 、 { + } 、 { \* } 、 { - } 、 { -- }

Results	Calibration	Data	Cut off					Ratio/Inhibition	Q.C.	Kinetic	Report	
	1	2	3	4	5	6	7	8	9	10	11	12
A	-	-	-	-	-	-	-	*	*	+	+	*
B	-	-	-	-	-	-	-	-	*	+	+	*
C	-	-	-	-	-	-	-	-	*	+	+	*
D				-	-	-	-	-	*			
E				-	-	-	-	-	*			
F				-	-	-	-	-	*			
G				-	-	-	-	-	*			
H				-	-	-	-	-	*			

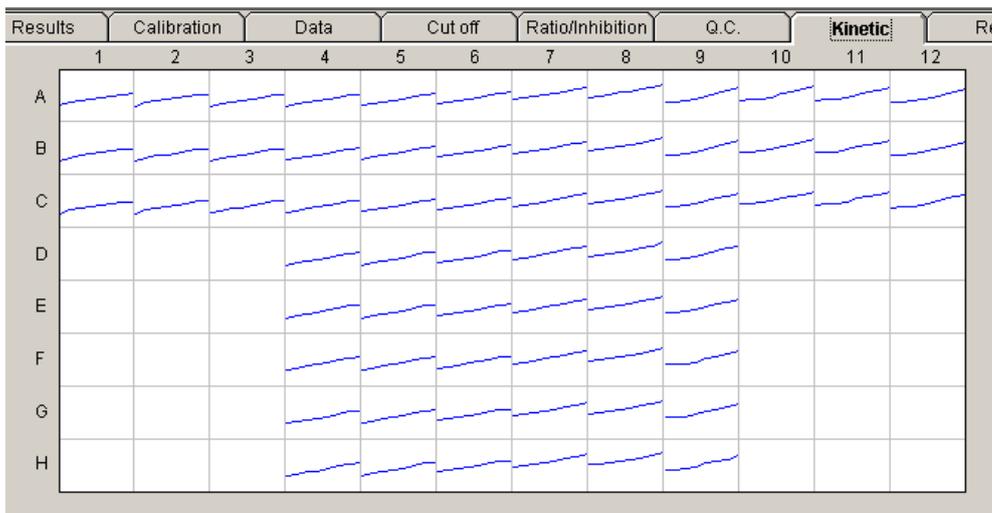
Ratio/Inhibition results : When clicking the Ratio/Inhibition tab and finished configuring. The AgileCon will show the sample OD value and standard OD value (BO) using % Inhibition. Ratio is represented in Blue, Inhibition is represented in Red. Over 200% the data will show Hi, lower than -200% will show LO

Results	Calibration	Data	Cut off	Ratio/Inhibition					Q.C.	Kinetic	Report	
	1	2	3	4	5	6	7	8	9	10	11	12
A	104.13 %	101.90 %	99.78 %	96.52 %	89.92 %	88.78 %	42.90 %	40.07 %	34.27 %	0.00 %	0.00 %	9.60 %
B	104.13 %	101.90 %	99.78 %	96.52 %	89.92 %	88.78 %	42.90 %	40.07 %	34.27 %	0.00 %	0.00 %	9.60 %
C	104.13 %	101.90 %	99.78 %	96.52 %	89.92 %	88.78 %	42.90 %	40.07 %	34.27 %	0.00 %	0.00 %	9.60 %
D				100.43 %	93.43 %	92.88 %	45.48 %	44.80 %	35.39 %			
E				100.43 %	93.43 %	92.88 %	45.48 %	44.80 %	35.39 %			
F				100.00 %	93.43 %	92.88 %	45.48 %	44.80 %	35.39 %			
G				96.33 %	93.43 %	92.88 %	45.48 %	44.80 %	35.39 %			
H				96.33 %	93.43 %	92.88 %	45.48 %	44.80 %	35.39 %			

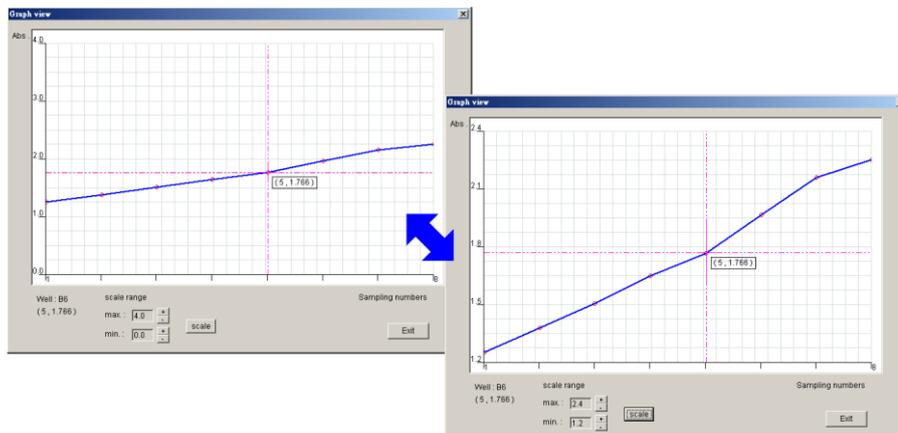
Q.C results: After clicking the QC calculation method and finished configuration, the AccuMate will show the QC criteria, Pass condition, Result on the data sheet

Results	Calibration			Data			Cut off			Ratio/Inhibition			Q.C.			Kinetic					
	A	B	C	D	E	F	G	H	I	J	K	L	M								
1	Quality controls																				
2	Controls:																				
3		control	abs.	conc.																	
4		PC	-0.009	83.513																	
5		NC	0.073	110.217																	
6	Criteria:																				
7		QC1:			+1.000	*PC	+1.000	*NC	+1.500	<=	+1.200										
8		QC3:	-0.500	<=	+0.000	*PC	+1.000	*NC	+0.000	<=	+1.000										
9	Pass condition:																				
10	if QC = TRUE then PASS																				
11		QC = QC1 AND QC3																			
12	Result:																				
13		QC1:	FAIL																		
14		QC3:	PASS																		
15		QC:	FAIL																		
16																					

Kinetic results: When using the kinetic measuring method AccuMate will display the kinetic curve of every reading. User can check the reaction rate easily on this screen.



Double click on the curve to show a detailed view of the plate number and OD value



View Report : To view report users will have to go into file and click the Generate/Preview report tab for the AgileCon to generate report. After reports being generated, users can use the Export/print option to save to Excel or print. The report will be saved in Program Files\ACTGene\AgileCon\Data under excel file.

Results	Calibration	Data	Cut off	Ratio/Inhibition	Q.C.	Kinetic	Report							
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	< Experiment title >													
2	Name :													
3	User :													
4	Note :													
5	Date :	06/10/08	Time :	17:06:44										
6														
7	< Protocol parameters >													
8	Experiment file path :	Sample.exp												
9	Measurement type :	End point												
10	Measurement mode :	Continuous												
11	Main_1 filter(nm) :	450												
12	Starting method :	Immediate												
13	Need shake :	No												
14	Need incubate :	No												
15	Need quantitative :	Yes												
16	Quant. method :	Curve on plate												
17	Quant. standards number :	5												
18	Quant. replicates number :	5												
19	Curve fit method :	Cubic polynomial												
20	Cutoff method :	Double threshold												
21	Upper threshold/label :	+ for > 2.000												
22	Lower threshold/label :	- for < 1.200												
23	Need ratio/inhibition :	Inhibition												
24	B0 well :	C10												
25	Need quality control :	Yes												
26	QC1=	+ 1.000*PC+ 1.000*NC+ 1.500 < + 1.200												
27	QC3=	-0.500 < + 0.000*PC+ 1.000*NC+ 0.000 < + 1.000												
28	Pass condition:	QC = QC1 AND QC3												
29														

## Appendix A

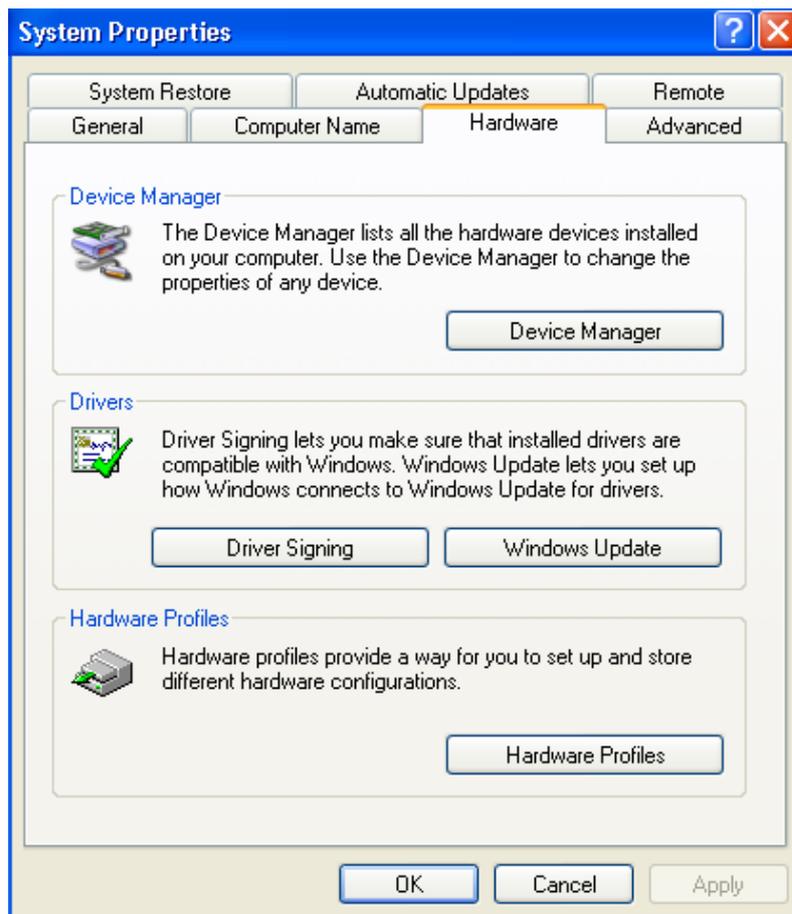
### Setting of USB Serial Port

If your Windows(XP/98SE) PC has USB ports only, please install the attached USB to RS232 driver on PC. Connecting the USB cable between PC and AMPR-750, then power it up. Please set up your Windows(XP) computer as follow.

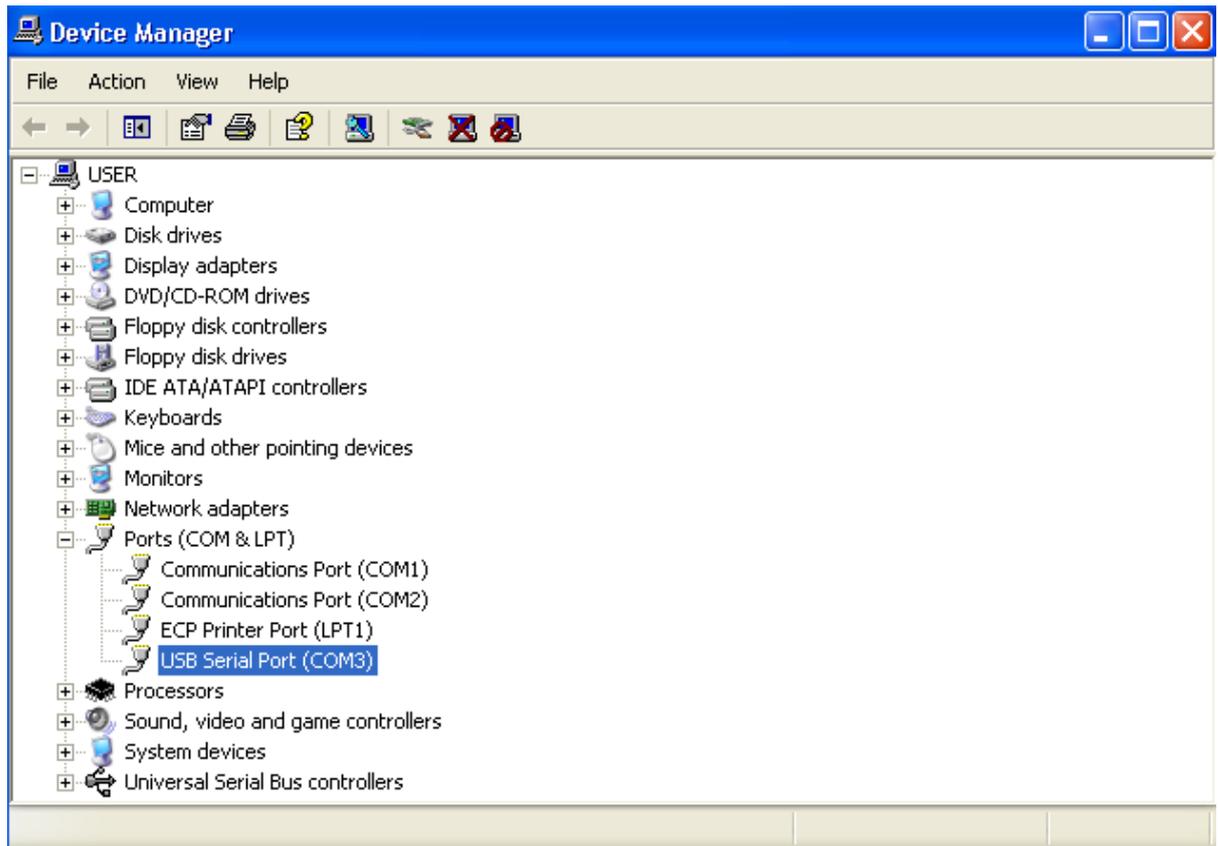
Under '**Systems Tasks**' of '**My Computer**' screen, press '**View system information**'. In System Properties, select icon '**Hardware**' and press button '**Device Manager**'(figure A-1).

In Device Manager, double click '**USB Serial Port**'(figure A-2) to enter port setting(figure A-3). Please remember the com-port number for further use in appendix B. Fill in '**57600,8,None,1,None**' in those blanks. Press button '**Advanced..**' to enter advanced COM setting(figure A-4). USB transfer size is to be selected as max number(4096). Latency timer is to be smallest number(1)

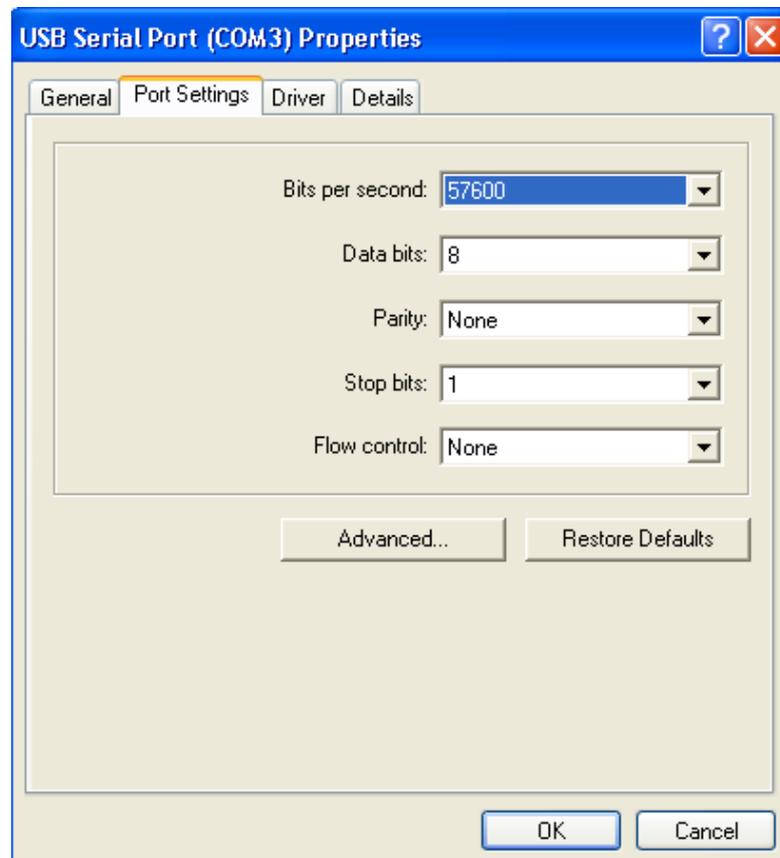
Upon finishing above procedure, please go to appendix B for further operation.



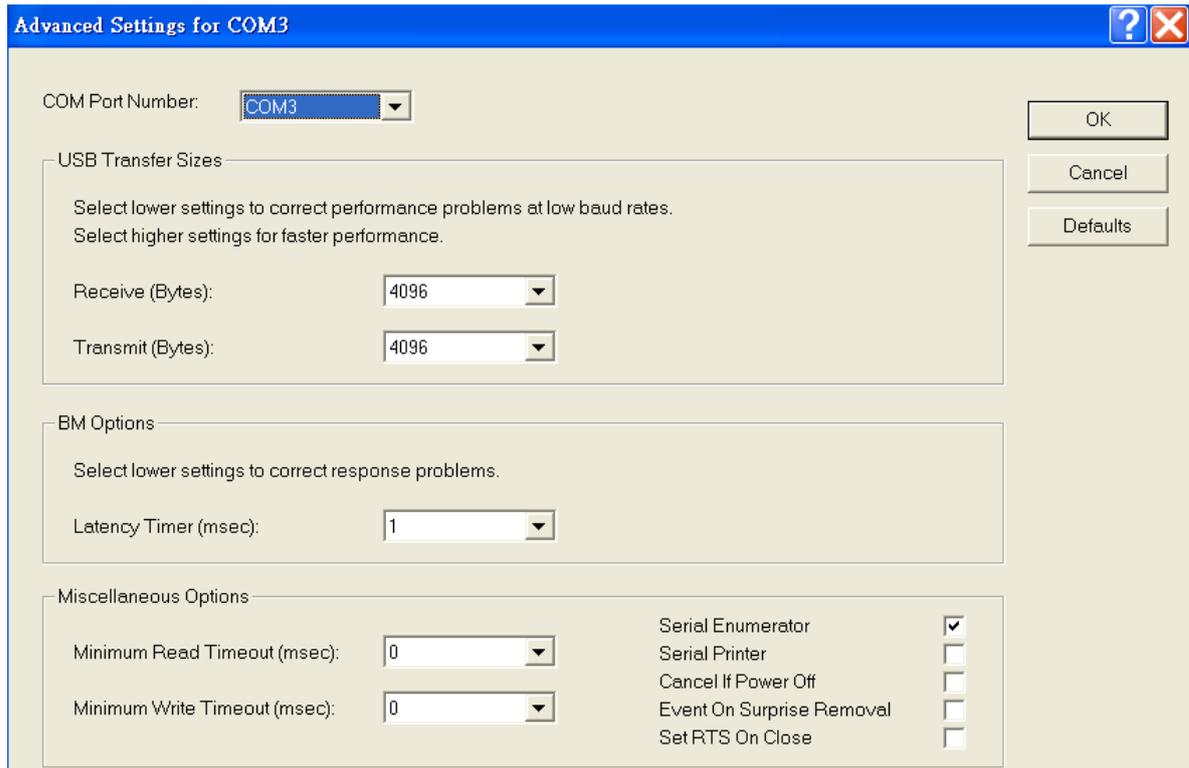
(Figure A-1)



(Figure A-2)



(Figure A-3)



(Figure A-4)