Parameter settings for prevention of cross-contamination

1. Reagent

In order to prevent reagent cross-contamination after the sample&reagent needle finished pipetting the biochemical reagents that can cause contamination to another test, the following procedures shall be followed for instrument setting. After the test of [contaminating items] and before the test of [contaminated items], the reagent needle shall be washed with acid or alkaline wash liquid.

Step1: Click the [Cross Contamination] button in the Setting screen to enter the cross-contamination parameters setting interface, and then choose the reagent panel as shown below:

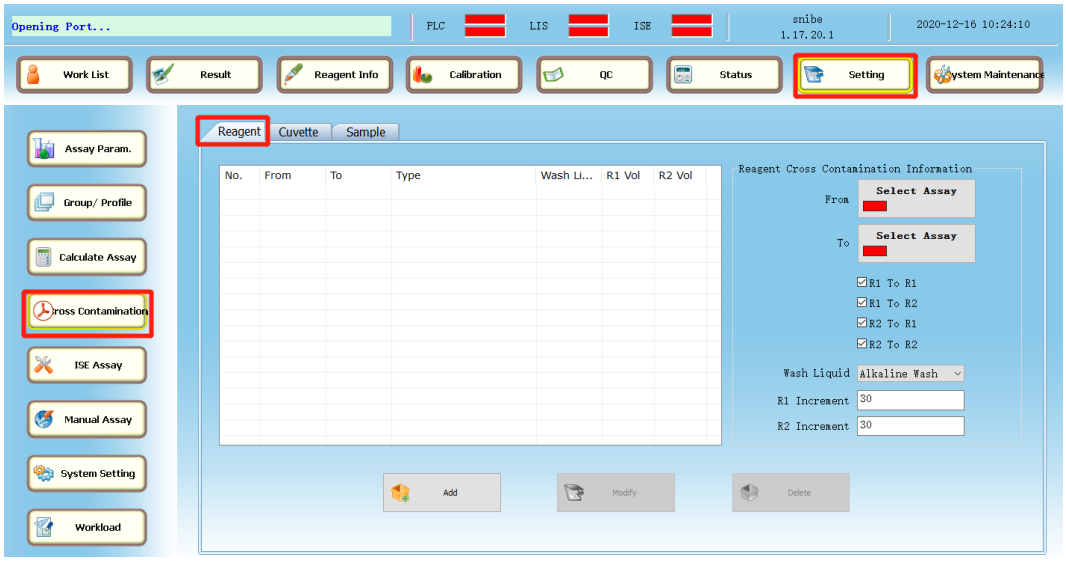


Fig 1-1

Step2: Take AST-TG for example (AST test may cause contamination to TG test). Choose the AST assay in the [From] menu and TG assay in the [To] menu respectively:

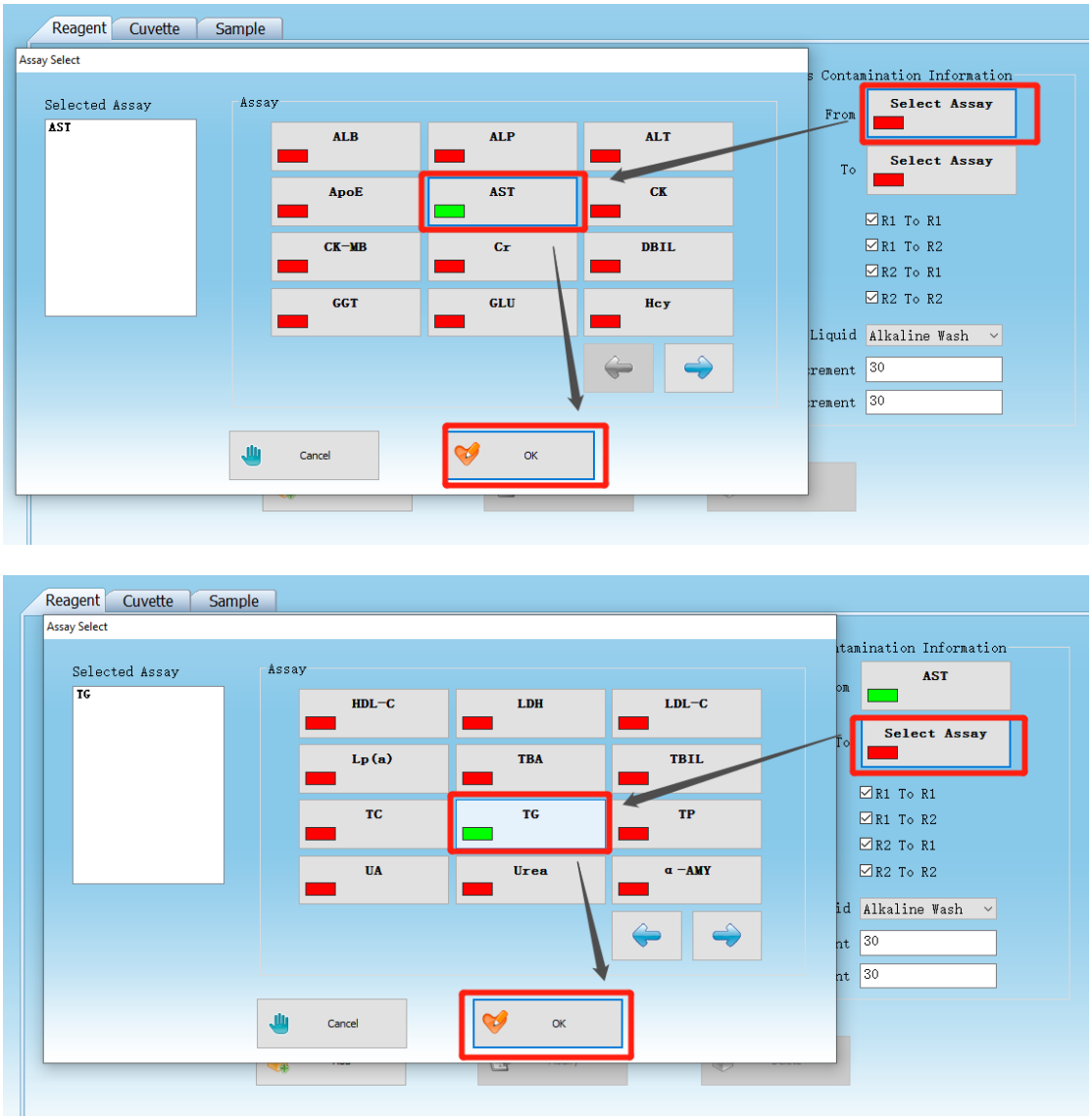


Fig 1-2

Step3: Select the reagent cross-contamination types. If you only know that there is cross-contamination between the reagents, but you are not sure what kind of cross-contamination it is, choose them all as shown below:

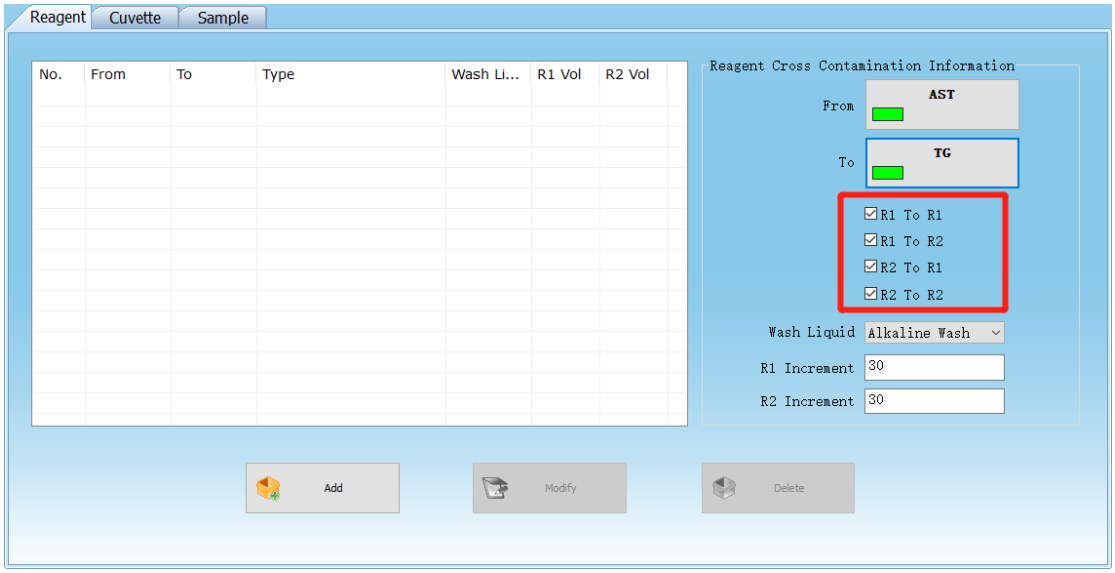


Fig 1-3

Step4: Select the proper washing liquid (according to the reagent inserts or choosing acid wash in most cases). The default reagent increment is 30uL (the range of this increment is 0~100uL, and the total wash liquid volume for reagent cross-contamination washing process should be 20~380uL). Click [Add] button to complete this reagent cross-contamination setting from AST to TG. The R1 and R2 volumes are 200uL and 50uL respectively for Snibe AST assay and 240uL, 60uL for TG assay. So the cross-contamination preventing wash liquid volume for R1 is 200 + 30 = 230uL and 50 + 30 = 80uL for R2 respectively.

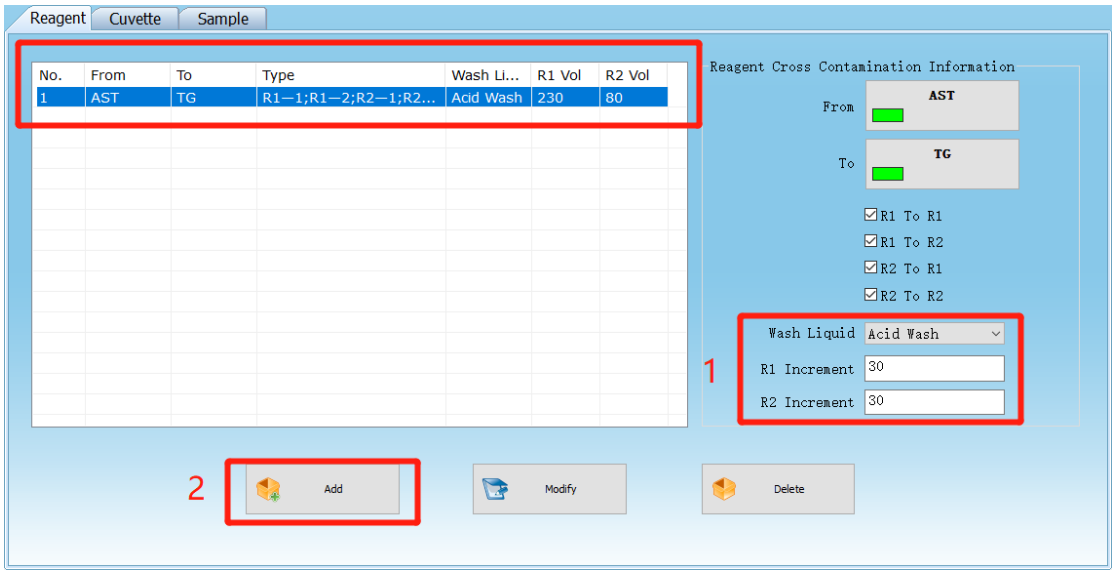


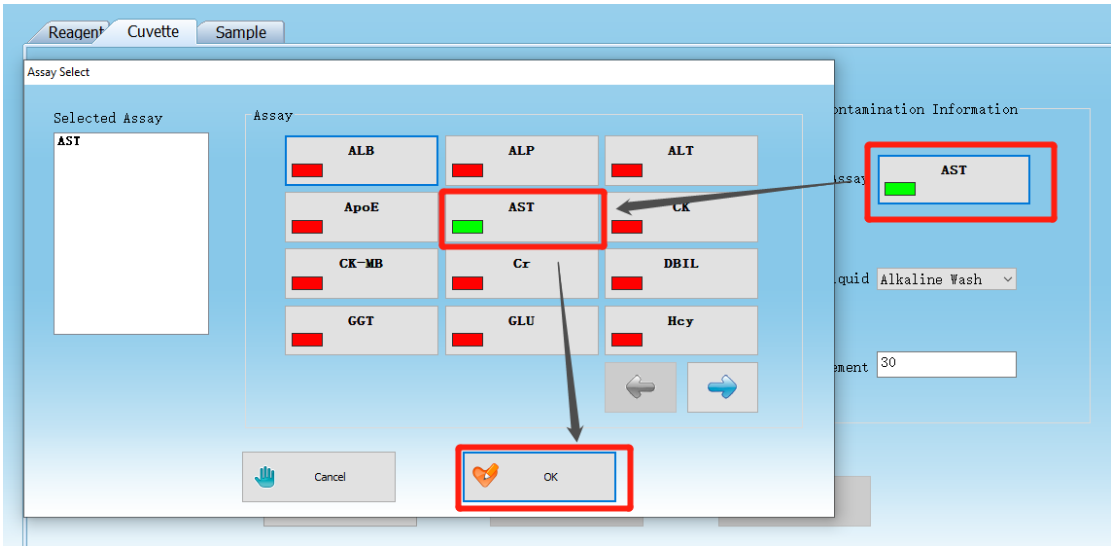
Fig 1-4

2. Cuvette

Click [Cuvette] to access the cuvette cross-contamination setting panel. Take the Snibe AST test as an example (R1=200uL, R2=50uL, Sample=25uL), we select the AST assay firstly, and then select the proper type of wash liquid and enter a proper increment volume (the range of this increment is 0~100uL) in the edit box, after that, click [Add] button to complete the cuvette cross-contamination setting.

Note:

1. Total wash liquid volume = sample volume + R1 volume + R2 volume + increment, and it should be within the range of 20~400uL.
2. For this case, the total wash liquid volume is 25+50+200+30=305uL, so the pipetting needle will aspirate the alkaline wash liquid of 153uL and 152uL respectively to wash the cuvette.



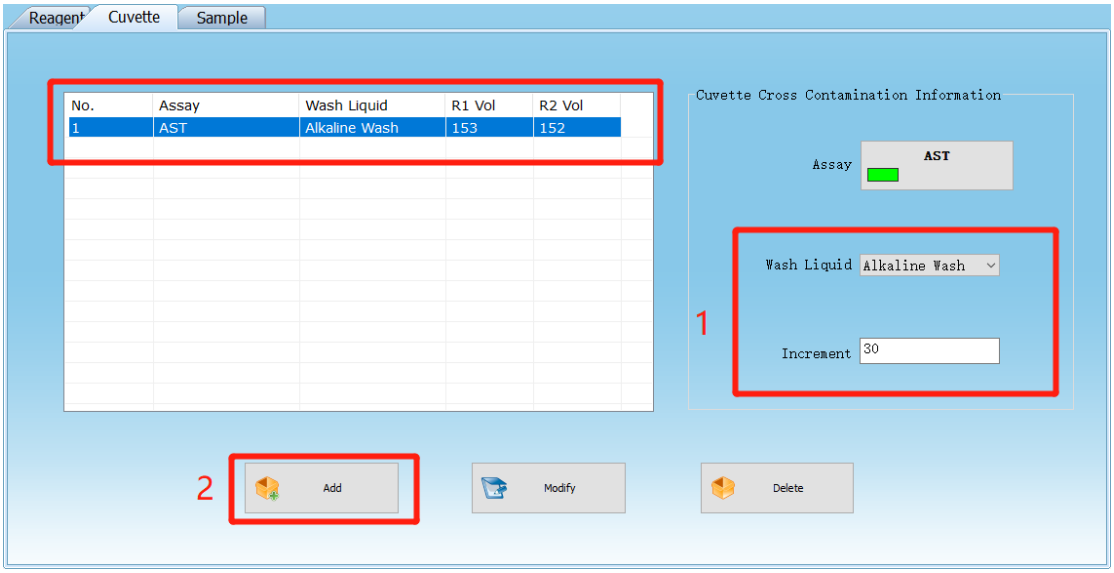
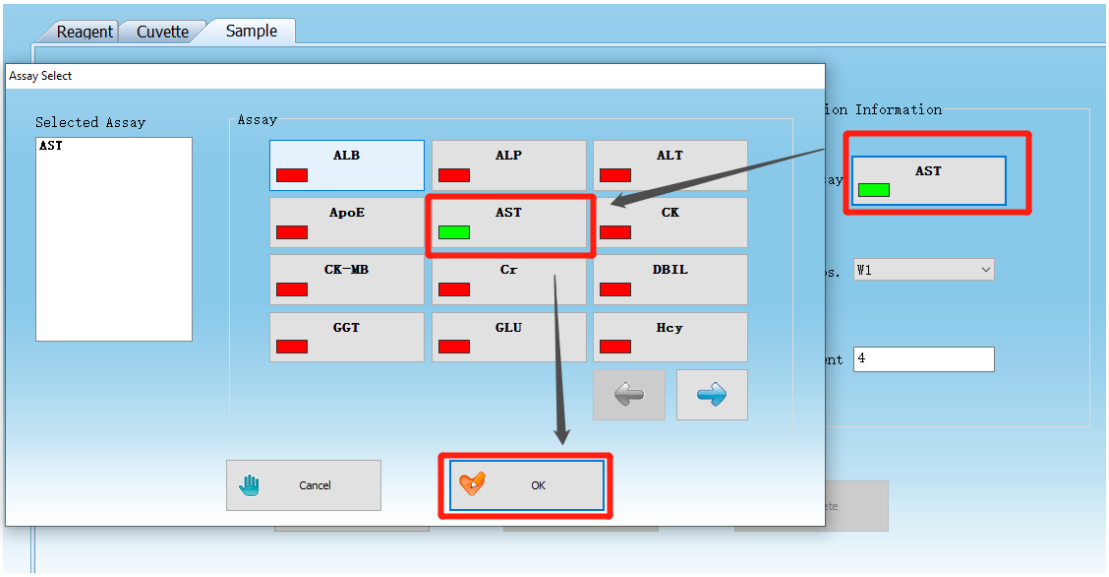


Fig 2-1

3. Sample

Click [Sample] to access the sample cross-contamination setting panel. Also, take the Snibe AST test as an example, we select the AST assay firstly, and then click and select W1 or W2 (in which you put the wash liquid) in [Wash Liquid Pos.] area. The default increment is 4uL (the range of this increment is 0~20uL, and the total wash liquid volume for sample cross-contamination washing process should be 2~35uL). After that, click [Add] button to complete the sample cross-contamination setting.



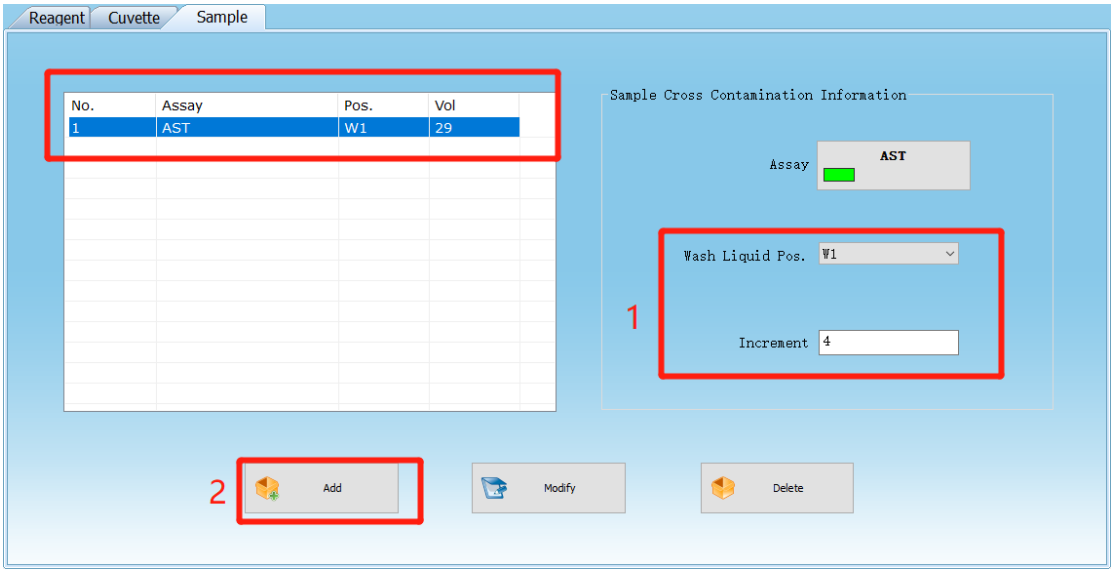


Fig 3-1

Note:

1. For this case, the total wash liquid volume is 25+4=29uL, so the pipetting needle will aspirate the wash liquid of 29uL in W1 to wash itself.