

## Installation and Usage Instruction For TSE Protocol and Templates

### PURPOSE

This set of files are aimed to provide official Bio-Rad TSE Protocols and Templates files to be installed and used together with Microplate Manager PC software application (version 5.2 and above), so TSE testing can be performed and reported easily and securely.

### EXPLANATION OF THE FILES

Two sets of files are provided here:

- Four MPM Protocols files:
  1. Model550TSE.epr – should be used to read plates in Microplate Manager PC Software when using Model 550 reader, and for manually purified samples (non-NSP)
  2. Model550TSE(NSP).epr – should be used to read plates in Microplate Manager PC software when using Model 550 reader together with NSP system
  3. Model680TSE.epr – should be used to read plates in Microplate Manager PC Software when using Model 680 reader, and for manually purified samples (non-NSP)
  4. Model680TSE(NSP).epr – should be used to read plates in Microplate Manager PC software when using Model 680 reader together with NSP system
- Two Excel Template files:
  5. TSE.xlt – this is a Microsoft Excel Template file that is constructed to report TSE testing (for manually purified samples [non-NSP])
  6. TSE (NSP).xlt – this is a Microsoft Excel Template file that is constructed to report TSE testing done with NSP system

### INSTALL THE FILES

You need to copy the files provided here to the correct location (directory) so they can be used properly.

- Find your Microplate Manager directory: when installed according to default settings, it should be installed on your C drive, under *Program Files > Bio-Rad > Microplate Manager*
- Copy all files here into the *Custom Templates* folder under Microplate Manager directory

Now you are set to use the program and report your TSE Screening result automatically

### CUSTOMIZE TSE REPORTS

You should customize your TSE report before using it for the first time

- Open Microsoft Excel program
- Go to File -> Open or click on the Open icon, browse to the *Custom Template* folder in Microplate Manager directory. Open the TSE.XLT file by you are not using a NSP system, or the TSE (NSP).XLT file if you are using NSP system
- Open Page Setup... window under File menu, and select the paper size that you are using (default setting is Letter size)
- For TSE.XLT file: go to Analysis Settings worksheet, select from the list of Detection Protocols the one that you are using, then save the file
- For TSE (NSP).XLT file: go to Sample Info worksheet, browse and locate NSP database and select it for the Enter Database Filename space. Erase any information in Enter Purification Plate ID field. Then select correct Detection Protocol type in Analysis Setting worksheet. Save the template file

**Note:** if you change the template file name, then you will have to change your MPM protocol file and select the new file name in Custom Template window for Reports...

### READING OF A TSE DETECTION (ELISA) MICROPLATE

Place your detection plate when it is ready into your Bio-Rad microplate reader (Model 550 or Model 680 reader):

- Open Microplate Manager application, select *File > Open* (or click on the Open button). Change *Files of Type* to Endpoint Protocol (\*.epr) at the bottom of the window. Browse to the Custom Template folder under Microplate Manager directory
- Select the correct protocol file according to the reader type (Model 550 or Model 680) and whether this test was processed on NSP system, open this selected file
- Click on the Run button, fill in Technician name, Detection Plate ID, and Detection Lot information, then click on the OK button to read the plate
- Once the plate is read, raw data will be shown in Microplate Manager software, and the Excel program will be open and reading result will be filled into the Excel file, using the template you have customized above.

### **INPUTTING SAMPLE IDs**

From NSP database:

- In Sample Information worksheet, make sure database is correct, select correct Purification Plate ID, then click on Retrieve Sample IDs button. Sample IDs will be automatically filled in the Sample Information Sheet as well as on the Report Sheet.

Manual Input:

- In Sample Information worksheet, type in sample ID for each sample in Sample ID column. Such Sample ID information will be automatically shown on Report sheet.

### **REPORTING TEST RESULTS**

Once sample ID information is inputted in the Sample Information worksheet, this information will be displayed on the Report worksheet

- For any sample that has an ID associated with it, the sample ID will be displayed under result for each sample well location
- For any well position that has no sample ID information associated with it, the well location will not have any OD value, result or ID information displayed (unless sample IDs are cleared for the entire plate)
- For any sample that had a processing error in NSP database, an **!Error!** will be shown for the well position, together with its OD value and sample ID
- If Control validation (for positive or negative controls) failed for the plate, only OD value and sample ID will be shown for each sample and no result will be shown on report

### **EXPORTING TEST RESULTS**

In Sample Information worksheet, an optional step is available if exporting of TSE Screening result is desired, by clicking on the Export Results ... button in step Option 2. See TeSeE™ Analysis Module Instruction Manual for details on export format.