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1 How to create a protocol with factor calculation

1.1 Starting the software

Double-click on the software icon on the desktop.

Click on “Create a New Item”, “Protocol”.

1.2 Procedure settings

Double-click on “procedure” to set up a new protocol.
Fill in as shown in the screenshot above and confirm settings with “OK”.

Kinetic steps are defined as

![Kinetic Step](image)

Confirm settings with “OK”.
1.3 Plate Layout settings

**Note:** The example below utilizes a STD & STD blank for the factor (F) calculation. The controls & samples do not have blanks as they were not deemed as necessary for this laboratory. Contact your BioTek representative to incorporate control & sample blank values into the reader analysis.

Double-click on "Plate Layout" to set up the plate layout.

Add calibrator 1 and Calibrator 0 (Blank), controls and samples.

Fill in the Layout as shown in the picture above. (Sample ID can be chosen individually!). Confirm settings with “OK”
Attention!!! Calibrator value is lot dependent and concentration has to be entered for each lot.

1.4 Data Reduction settings

Double-click on "Data Reduction" to set up the data reduction.
1.4.1 Define Well Analysis as shown below

**Kinetic 1**

**Kinetic Analysis**

- **Label:** <default>
- **Data In:** 340

**Calculation Type**

- **Mean V**
- **Max V**
- **Mean Min/Max OD**
- **Mean, Std Dev, CV**
- **Onset OD**
- **Integral**
- **Formula**

**Select the data to show:**

<table>
<thead>
<tr>
<th>Data</th>
<th>Format</th>
<th>Color Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean V</td>
<td>&lt;Decimal,3&gt;</td>
<td>&lt;None&gt;</td>
</tr>
<tr>
<td>Y Intercept</td>
<td>&lt;Decimal,3&gt;</td>
<td>&lt;Blue scale&gt;</td>
</tr>
<tr>
<td>R</td>
<td>&lt;Decimal,3&gt;</td>
<td>&lt;None&gt;</td>
</tr>
<tr>
<td>R-Squared</td>
<td>&lt;Decimal,3&gt;</td>
<td>&lt;None&gt;</td>
</tr>
</tbody>
</table>

**Confirm settings with “OK”**

**Kinetic 1**

**Kinetic Analysis**

- **Label:** Onset
- **Data In:** 340

**Calculation Type**

- **Mean V**
- **Max V**
- **Mean Min/Max OD**
- **Mean, Std Dev, CV**
- **Onset OD**
- **Integral**
- **Formula**

**Select the data to show:**

<table>
<thead>
<tr>
<th>Data</th>
<th>Format</th>
<th>Color Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Onset Time</td>
<td><a href="">HH:MM:SS</a></td>
<td>&lt;None&gt;</td>
</tr>
<tr>
<td>Onset OD</td>
<td>&lt;Decimal,3&gt;</td>
<td>&lt;Blue scale&gt;</td>
</tr>
<tr>
<td>Basis Time</td>
<td><a href="">HH:MM:SS</a></td>
<td>&lt;None&gt;</td>
</tr>
<tr>
<td>Basis OD</td>
<td>&lt;Decimal,3&gt;</td>
<td>&lt;Blue scale&gt;</td>
</tr>
</tbody>
</table>

**Confirm settings with “OK”**
1.4.2 Define Transformations

Custom • SDT1-STD2

Ratio
Custom • Concentration

Confirm settings with “OK”

Filled in “Data Reduction” is
1.5 Report/Export settings

Double-click on “Report/Export Builder” to set up the report and export.

Attention!!! These settings can be individually adapted.

Double-click on “New Report” to set up the report.
Example of report settings
Confirm settings with “OK”

Double-click on “New Export to text” to set up the export

Define the export content

Confirm settings with “OK”