Calculate Expected P-value
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Overview
This script takes spreadsheet that contains a p-value column and calculates expected p-values for the specified column. It is also optional to export expected \(-\log_{10} p\) values as well.

Recommended Directory Location
Save the script to the following directory:
*..\Application Data\Golden Helix SVS\UserScripts\Spreadsheet\Edit*

Note: The Application Data folder is a hidden folder on Windows operating systems and its location varies between XP and Vista. The easiest way to locate this directory on your computer is to open SVS and select Tools > Open Folder > UserScripts Folder. If saved to the proper folder, this script will be accessible from the spreadsheet Edit menu.

Using the Script
1. Open a spreadsheet containing a p-value column, such as in Figure 1.

![Figure 1: P-values spreadsheet that needs expected values computed for Chi-Squared P](image)

2. Select Edit > Calculate Expected P-value.
3. Choose the column to compute the expected p-values and if expected –log 10 p-values should be computed as well, see Figure 2, and click OK.

![Figure 2: Input options for computing expected p-values](image)

The resulting spreadsheet will have all of the original columns plus one or two additional columns for the expected p-value and the expected –log 10 p-value if selected. The new spreadsheet will be created as a daughter of the original spreadsheet. See Figure 3.

![Figure 3: The expected p-values and expected –log 10 p-values have been calculated and added to the original spreadsheet.](image)