BPV Flex 2.1 Software

Release Notes
This document is provided to customers who have purchased SCIEX equipment to use in the operation of such SCIEX equipment. This document is copyright protected and any reproduction of this document or any part of this document is strictly prohibited, except as SCIEX may authorize in writing.

Software that may be described in this document is furnished under a license agreement. It is against the law to copy, modify, or distribute the software on any medium, except as specifically allowed in the license agreement. Furthermore, the license agreement may prohibit the software from being disassembled, reverse engineered, or decompiled for any purpose. Warranties are as stated therein.

Portions of this document may make reference to other manufacturers and/or their products, which may contain parts whose names are registered as trademarks and/or function as trademarks of their respective owners. Any such use is intended only to designate those manufacturers' products as supplied by SCIEX for incorporation into its equipment and does not imply any right and/or license to use or permit others to use such manufacturers' and/or their product names as trademarks.

SCIEX warranties are limited to those express warranties provided at the time of sale or license of its products and are the sole and exclusive representations, warranties, and obligations of SCIEX. SCIEX makes no other warranty of any kind whatsoever, expressed or implied, including without limitation, warranties of merchantability or fitness for a particular purpose, whether arising from a statute or otherwise in law or from a course of dealing or usage of trade, all of which are expressly disclaimer, and assumes no responsibility or contingent liability, including indirect or consequential damages, for any use by the purchaser or for any adverse circumstances arising therefrom.
(GEN-IDV-09-10816-B)

For Research Use Only. Not for use in Diagnostic Procedures.

Trademarks and/or registered trademarks mentioned herein are the property of AB Sciex Pte. Ltd., or their respective owners, in the United States and/or certain other countries.

AB SCIEX™ is being used under license.


AB Sciex Pte. Ltd.
Blk33, #04-06 Marsiling Industrial Estate Road 3
Woodlands Central Industrial Estate, Singapore 739256
Introduction

Thank you for choosing SCIEX to supply your system. We are pleased to bring you the BPV Flex Software.

This document describes features in the software and provides instructions for installing the software.

We recommend that users keep these release notes for reference as they become familiar with the software.

Note: The numbers in parentheses are reference numbers for each issue or feature in the SCIEX internal tracking system.

Workstation Requirements

CAUTION: Potential Data Loss. Do not install the BPV Flex Software on the acquisition computer. Software errors and data integrity issues can result if the BPV Flex Software and acquisition software are used concurrently.

- SCIEX Alpha Workstation 2020, with:
  - An Intel Core i5-8500 processor (6 core, 9 MB cache, 3.0 GHz, 4.1 GHz Turbo, with HD Graphics 630)
  - 32 GB (2 × 16 GB) 2666 MHz DDR4 UDIMM Non-ECC
  - 2*2 TB HDD (RAID1)
  - DVD±RW
- Dell OptiPlex XE2 computer with:
  - An Intel Core i5-4570S processor (Quad core, 2.90 GHz, 6 MB with HD Graphics 4600)
  - 32 GB DDR3 1600Mhz SDRAM
  - 2*2Tb HDD (RAID1)
  - DVD+-RW
Note: Newer systems might become available. For more information, contact the local sales representative. Older computer models might be compatible. However, they have not been tested and might result in degraded performance.

Software Requirements

The workstation must be configured with the following applications:

- English version of the Windows 10, 64-bit operating system

  Note: Cybersecurity support is included for Windows 10, 64-bit operating systems.

- Microsoft .NET Framework 4.6.2

- Adobe Reader

  Note: Visit www.adobe.com and follow the instructions to install the latest version of Adobe Reader.

- Microsoft Office 365

  Note: If a trial version of Microsoft Office is installed on the computer as a temporary measure, then the full version of the Microsoft Office software must be activated before the trial period expires. The license can be purchased from your regional division of Microsoft or from an authorized distributor in your region.
Installation Instructions

Install the Software

Prerequisite Procedures

- (If applicable) Uninstall any earlier version of the BPV Flex Software

1. Log on to the computer as a user with Administrator privileges.
2. Download the BPVFLEX-2.1.zip file from sciex.com/software-support/software-downloads.
   
   **Tip!** To prevent potential installation issues, save the file to a location other than the computer desktop and disconnect any external USB storage devices.

3. After the download is complete, right-click the BPVFLEX-2.1.zip file.
4. Click **Extract All** and then select a destination folder.
5. After the extraction is complete, navigate to the selected destination folder and then double-click the setup.exe file.
6. Follow the on-screen instructions to complete the installation.
7. Restart the computer.

License the BPV Flex Software

The BPV Flex Software is a licensed product. If a valid 2.1 license is not installed, or if the license has expired, then the processing and saving functions are not available.

**Note:** The same license file and license key (Activation ID) can be used for both the BPV Flex 2.1 Software and the BioPharmaView™ 3.0.2 Software.

1. Open the BPV Flex Software.
   
   If a valid license file does not exist, then the BPV Flex Activation dialog opens. Continue with step 3.
If the user closes this dialog without licensing the software, then the BPV Flex Software opens. A message at the bottom of the window indicates that there is an issue with the license.

**Figure 2-1 License Message**

Any of the following conditions can result in this message being shown:

- A valid 2.1 license is not installed.
- The computer network connection is not available. The licensing components used by BPV Flex Software require that the computer network adapter be enabled, although a physical connection to the network is not required.

2. To license the software when the BPV Flex Software window is open, follow these steps:
Installation Instructions

a. Click More > About.

Figure 2-2 More Options

b. Click Software Activation.

**Note:** The Copy ID to Clipboard and Install License File buttons are disabled until the user enters an activation ID.

3. In the BPV Flex Activation dialog, type the license key in the appropriate field.
   If a license key is not available, then contact sciex.com/request-support.
4. Click **Generate Computer ID**.
   This creates a unique identifier for the workstation.

5. Click **Copy ID to Clipboard**.

6. Click the **sciex.com/request-support** link.

7. Log on to access the software activation page.

8. Follow the instructions to obtain the license.
   After the required information is submitted, a license file is sent to all of the e-mail addresses provided.

9. After the e-mail containing the license file is received, copy the license file to the workstation Desktop.

10. Click **Install License File** on the BPV Flex Activation dialog.
    The Select the new license file to be installed dialog opens.

11. Browse to and select the license file and then click **Open**.
    Both the Select the new license file to be installed and the BPV Flex Activation dialogs close.
12. Click OK to close the About BPV Flex dialog.

Remove the BPV Flex Software

1. Log on to the computer as a Windows user with Administrator privileges.
2. Click Start > Control Panel > Programs and Features.

   **Tip!** If the control panel components are shown by Category, then click Start > Control Panel > Programs > Programs and Features > Uninstall a program.

3. Select the BPV Flex Software and then click Uninstall.

   The software is removed, with no user intervention required.

   During the removal, the software name is removed from the Installed Programs list, the shortcut to the BPV Flex Software is removed from the desktop, and the shortcuts to the software and the user documentation are removed from the Start menu.

   **Note:** If the product is licensed, then the license file is not removed and can be used if the BPV Flex Software is installed again.
New in Version 2.1

This section describes the enhancements and fixes in the BPV Flex 2.1 Software. To view the enhancements and fixes for the previous releases of the BPV Flex Software, refer to the *Release Notes* that came with that version of the software.

New Features in Version 2.1

- **Peptide mapping workflow features:**
  - The user can choose to show the peptide sequence, which provides sequence coverage information, on the MS/MS graph. (BPV-6322)
  - The Matched Results Table contains a % **Peptide Sequence Coverage** column on both the Explore and Optimize and Review Results pages. % **Peptide Sequence Coverage** is also shown on the peptide tooltip. (BPV-6280)
- **Support for multiple periods:** The software can now process data files with multiple periods. (BPV-5772)

Enhancements in Version 2.1

- **All graphs:** Labels can be shown with a vertical orientation, to make graphs more readable. (BPV-6565)
- **MS/MS graph:** This version contains the following enhancements to the display of MS/MS data:
  - The user can choose to show the peptide sequence on the MS/MS graph. (BPV-6322)
  - The user can choose whether to identify the fragment type with colored labels or with colored highlights. The labels or highlights are color-coded based on fragment type. (BPV-6565)
New in Version 2.1

- **Peptide mapping workflow enhancements:**
  - **TOF MS graph:** The user can choose to show charge series on the TOF MS graph. If this option is selected, then the location of theoretical charge states for a selected result is shown. For a matched result the theoretical charge states are calculated using theoretical m/z, whereas for an unmatched result the theoretical charge states are calculated using observed m/z. (BPV-6357)
  - **Results:** This version contains the following improvements for peptide mapping results:
    - The Summary table now shows the % sequence coverage for all matched peptides, for all auto-validated peptides, and for all peptides set to Use. (BPV-6256)
    - When multiple Results files are open, the Summary tab contains a Combined row, which shows the combined sequence coverage for all of the Results files. (BPV-6415)
  - **Reprocessing:** To save time, full reprocessing is no longer triggered when the user makes selected changes to the analysis settings. Instead, the software selectively executes reprocessing from a certain step in the data processing algorithm, to optimize the results more quickly. (BPV-5846)
  - **Scrambled disulfide enhancements:** This version contains the following improvements to scrambled disulfide support:
    - The Disulfide Bond table contains row numbers. (BPV-6321)
    - N-Ethylmaleimide (NEM) has been added to the list in the **Cystein Alkylation** field in the Analysis Settings pane. (BPV-6216)
    - For peptides containing a free cysteine residue, the **Disulfide Bond** column now contains **Free Theol.** (BPV-6278, BPV-6570)
  - **Messages:** In both the intact protein and peptide mapping workflows, new icons in the **Messages** column in the Results Table identify the type of match. These icons replace the text previously shown in that column. In the peptide mapping workflow, a new icon identifies peptide sequences found at multiple retention times. The user can filter results using the icons. (BPV-6369)
  - **Analysis Parameters Summary:** The sample number, experiment number, and period number, if applicable, are now shown in the Analysis Parameters Summary. (BPV-6274)
  - **Save options:** When saving a copy of a project, the user can choose whether to save the molecule definition only or to save a copy of the original project, including Results files and any project settings. (BPV-4647)
  - **Modifications:** The list of modifications has been updated. (BPV-5952)
Fixed Issues in Version 2.1

- The Repair function was not available when the BPVFlex.msi installation script was run from the self extracting installation folder after the BPV Flex Software had been previously installed. (BPV-4716)

- The peak list did not fill the entire available space when the user opened an Intact Protein project that had more than two reconstructed peaks, opened the Peaks table, and then maximized the pane to see both the graph and the peak list. (BPV-5812)
Known Issues

- Processing is unsuccessful or results are invalid if the Region and Regional format settings configured during the installation of the operating system do not match the Region and Language settings for the user. To avoid this issue, we recommend setting the Region to United States, and the Language to English (United States). (BPV-6382)

To set the Region and Language for the user, open the Region & language control panel. To set the Region for the operating system, click Related settings > Administrative language settings at the bottom of the Region & language control panel.

- The message "The Software is NOT ACTIVATED or the LICENSE HAS EXPIRED" is shown after the software is licensed. Workaround: Close and then open the software. (BPV-6215)

- Occasionally, the color-coding in the DAR and Payload graph legends is not shown correctly after the results of the analysis are unloaded and then loaded again. Workaround: Select and then clear the View checkbox for one of the entries in the table next to the graph. (BPV-4860)

- The data format of the AA Index is not maintained when the data is copied and then pasted in an Excel spreadsheet. To avoid any issues with Excel updating the copied content, change the cell format to text in the Excel spreadsheet before pasting the data. (BPV-2100)

- Spaces in the Results table are not recognized in Excel. Workaround:
  - Do not use spaces when typing text in the Results table.
  - When searching the Excel spreadsheet for text containing spaces, use a wildcard (?) character. (BPV-6287)

- The values shown in the XIC Area column of the Peptide Results table are determined by processing and are used for subsequent modification percent calculations. XIC Area values are also shown in the Area column of the XIC Peaks tab in the BPC/TIC/XIC pane. However, because there might be slight differences in the values, the values in the XIC Peaks tab should be used for information purposes only. (BPV-868)

- A mismatch is observed between the m/z value in the Peptide Results table and the m/z value shown in the XIC in the graph header. Always use the m/z values listed in the Results Table and the TOF-MS graph header because the values shown in the XIC graph header is from an intermediate step during processing and should be used for information purposes only. (BPV-5242)
Known Issues

- If a secondary monitor is turned off or if the cable is disconnected from the monitor, then the BPV Flex Software and any floating windows on that monitor are not automatically visible on the primary monitor. If the application or floating window is not visible, then do one of the following:
  - If the BPV Flex application is on the screen that is no longer visible, then press Alt + Tab to select the BPV Flex Software from the running applications, hold down the Windows key and then use the Left or Right arrow keys to move the application to the visible monitor.
  - If the BPV Flex Software is stuck on a monitor, press Alt+Space+M, use the Left or Right arrow keys to move the application to the visible screen, and then press Enter to place the application.
  - If only a floating window is off-screen, then click Settings- > Reset default layout. (BPV-4340)

- The Modification table shows an error icon if the same modification is added for different workflows in the Molecule page and in the Explore and Optimize page. Workaround: Set the modification to Both workflows in the Define Molecule page and then remove the modification from the Explore and Optimize page. (BPV-4776)

- When the user connects remotely to the software and floats one of the panels, if the user subsequently ends the remote connection and then connects again using a different number of monitors for the remote connection, then the software stops responding. (BPV-5659)

- An error is generated when the user attempts to paste a very large sequence viewer image where the protein definition contains many chains in PowerPoint. When this issue occurs, paste the image in Paint, resize the image, and then paste the image in PowerPoint. (BPV-5819)

- If a white screen is shown when the software is opened after a power outage, then the user interface preferences might have become unusable. If this issue occurs, then do the following:
  1. Close the BPV Flex Software.
  2. Open Windows File Explorer and the type the following in the navigation bar: %LOCALAPPDATA%\SCIEX\BPVFlex.exe_url_zsw5cspffhupfda3rpyapo0oiz5tmj2g
  3. Delete the 2.1.0.0 sub-folder.
  4. Open the BPV Flex Software and then customize the window layout and the graph options that have returned to their default settings. (BPV-5141)

- Results cannot be generated using the multi-submit feature if the data files are stored on a network. Only data files on a local drive can be used to generate results using the multi-submit feature. (BPV-5609)
Contact Us

Customer Training

- In North America: NA.CustomerTraining@sciex.com
- In Europe: Europe.CustomerTraining@sciex.com
- Outside the EU and North America, visit sciex.com/education for contact information.

Online Learning Center

- SCIEX University™

SCIEX Support

SCIEX and its representatives maintain a staff of fully-trained service and technical specialists located throughout the world. They can answer questions about the system or any technical issues that might arise. For more information, visit the SCIEX website at sciex.com or contact us in one of the following ways:

- sciex.com/contact-us
- sciex.com/request-support
- StatusScope.Migration@sciex.com

CyberSecurity

For the latest guidance on cybersecurity for SCIEX products, visit sciex.com/productsecurity.

Documentation

This version of the document supercedes all previous versions of this document.
To view this document electronically, Adobe Acrobat Reader is required. To download the latest version, go to https://get.adobe.com/reader.

The latest versions of the documentation are available on the SCIEX website, at sciex.com/customer-documents.

**Note:** To request a free, printed version of this document, contact sciex.com/contact-us.