

Software note**Biacore™ S200 Software version
1.1.1**

This document describes

- Biacore™ S200 Control Software version 1.1.1
- Biacore™ S200 Evaluation Software version 1.1.1

in terms of functionality, fixed and known software issues.

The software note is also accessible on web (cytiva.com/biacore); create an account and log-in to enable download of software and related documents. Please check the web version for the latest information. A valid product key is required for software installation following download.

Operating systems

Biacore™ S200 Software version 1.1.1 is compatible with the following operating systems:

- Microsoft™ Windows™ 10 Professional, 64-bit
- Microsoft™ Windows™ 10 Enterprise, 64-bit

Functionality

The functionality is described in detail in the Biacore™ S200 Software Handbook that can be downloaded on the web, see www.cytivalifesciences.com/support/software/Biacore-downloads, following log-in.

Design Engineering for Cyber Security

The product has been developed using the Cytiva process for Design Engineering Privacy and Security (DEPS). This process incorporates security controls from the Cytiva controls catalogue, based on NIST 800-53, into our product specifications, to meet privacy and security. The process includes the following key elements:

- Analysis of inherent risks based on an asset analysis
- Privacy impact assessment to minimize collection, use, and disclosure of identifiable personal data and ensure adequate controls application
- Security risk assessment based on analysis of security threats and potential security related failure modes

This product was tested according to Cytiva Privacy and Security Catalogue, version 6.

The Privacy and Security Manual for this product is available for download at <https://www.cytivalifesciences.com/shop/protein-analysis/spr-label-free-analysis/systems/biacore-s200-p-05541#related-documents>. It is an important document that describes Privacy and Security considerations of the product – specifically the expected intended use, the Privacy and Security capabilities included, and how they are configured and used appropriately.

Biacore™ S200 Control Software version 1.1.1:

New functionality compared to version 1.1

#	Description
1	The software is now Cytiva branded
2	Biacore™ S200 Control Software version 1.1.1 has been verified with Windows 10 Professional edition (64-bit) and Windows 10 Enterprise edition (64-bit). Support for Windows 7 and Windows 8.1 has ended.
3	Maintenance tool Desorb and Sanitize: The name of the sanitation solution has changed from "BIAdisinfecent solution" since this has been removed from the maintenance kit. Instead, the more generic term "disinfecant solution" is used.
4	The default activation solution for immobilization with aldehyde coupling has been changed from "Hydrazine" to "Carbohydrazide" to align with our current recommendations for sensor chips C1, CM5 and Custom.

Fixed issues

#	Description
1	Runs are terminated with error code 087:007 in rare situations depending on combinations of certain injection types and injection lengths.
2	In some cases, a third-party component (Matlab) used by Biacore™ S200 Software came in conflict with antivirus software, causing Biacore™ S200 Software to crash. This component is now replaced, so there is no longer any need for an antivirus program exception for folder "%temp%\%username%\mcrCache7.11".

Known issues

#	Description
1	Fast user switching It is not supported to run the Control Software while using the "Fast user switching" functionality in Windows.
2	Immobilization wizard No warning is displayed when performing a second immobilization on an already immobilized sensor chip.
3	System Check report: If selecting only one test to be performed, the following non-relevant information is printed in the report: To download Injection start optimization feature press Next three times... The system might need priming – No download is possible All reported data is correct, and nothing happens if pressing Next.
4	Tools: In rare situations this error message can appear after a tool (like Desorb) is completed, or when one step in the tool is completed: System.NullReferenceException: Object reference not set to an instance of an object. At BWTToolDriver.WizMain.OnRunReady After closing this message, it may reoccur frequently until the instrument and PC have been restarted. Workaround: If this error occurs, restart the instrument and PC and rerun the tool.
5	When locating Biacore S200 Control Software version 1.1.1 in "Apps & features" in Windows and clicking the entry so it gets expanded, the version number "1.1.2" is shown instead of "1.1.1".

Biacore™ S200 Evaluation Software version 1.1.1

New functionality compared to version 1.1

#	Description
1	The software is now Cytiva branded
2	Biacore™ S200 Evaluation Software version 1.1.1 has been verified with Windows 10 Professional edition (64-bit) and Windows 10 Enterprise edition (64-bit). Support for Windows 7 and Windows 8.1 has ended.
3	Kinetic screen evaluation items: User defined parameters that are calculated in custom fitting models are now also available as columns in Result summary, not only in the parameter table.

Fixed issues

#	Description
1	When closing the filtering drop-down lists in some evaluation items (such as Plot & Sensorgram) the Evaluation software loses focus in Windows 10 and another program is shown instead.

Known issues

#	Description
1	Performance handling larger data sets: When performing affinity and kinetic evaluations with many samples 1Hz data is recommended as 10 or 40 Hz data might cause out of memory exceptions. The Result plot is designed to cope with up to 5000 single concentrations samples while the Kinetics and Affinity items are designed to handle up to 200 concentration series. Higher number of samples is not supported, especially opening and saving of files will take more time and the software might exhibit erroneous behavior.
2	Export curves: Fitted curves have a limit in the number of data points that can be exported using right click menu on a chart. Exported fitted curves are truncated at 32767 points, which corresponds to about 55 minutes at 10 Hz.
3	Plot: axes unit when looking at molecular weight adjusted slope. Displayed unit is 100*RU /Da and should be 100*RU/sDa.
4	Ligand levels: When adding custom report points in combination with capture corrections in result plot, the ligand level value will be incorrect if the custom report point name begins with "baseline" or "capture".
5	Kinetics and Affinity: Multiple R_{max} evaluation can only be performed on data from the same file and several Fc (for example for Fc 2-1 and Fc 4-3), not on data from several files
6	Report point table: Table columns with headers containing right bracket characters (]) cannot be filtered.
7	Export to Excel: There is a lack of consistency when it comes to the number of significant digits and the format of data exported to Excel (can be general format (e.g., 0.23) and scientific format (e.g., 2.3e-1) in the same result table).
8	Kinetics and Affinity: In rare situations, the calculated K_D value has been incorrectly presented by a factor of 10. This has occurred when the k_a/k_d ratio has been calculated to a value exactly matching the form $1.000 * 10^X$, where X is any integer value. Workaround: If a K_D value is presented as $1.000 * 10^X$ please double check the value with a manually calculated value for the k_a/k_d ratio. If there is an unexpected difference, make a minor change in placement of injection start or end, and refit the data. Repeat until the ratio k_a/k_d deviates from the $1.000 * 10^X$ format, and the K_D value is presented correctly.

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