Biacore X100
Getting Started

The Biacore™ X100 Getting Started Kit is used together with the instructions in the Getting Started Tutorial in Biacore X100 software to familiarize you with the basic operation of Biacore X100.

You will setup, run and evaluate a short experiment using the reagents in the Getting Started Kit, a Sensor Chip CM5 and reagents from an Amine Coupling Kit. The tutorial covers the following steps:

- Set up a workflow for binding analysis in the software

- Immobilize anti-β2-microglobulin on Sensor Chip CM5 using amine coupling chemistry

- Run the binding analysis assay to analyze the binding of β2-microglobulin to the immobilized antibody

- Evaluate the results

Note: *If you have Biacore X100 version 2.0 you can download a printable version with step by step instructions of the Getting Started Tutorial, including description of additional exercises for kinetic analysis, from within the Support Navigator.*

Requirements

The following materials are required for completing the Getting Started Tutorial:

- Biacore X100 system

- Biacore X100 Getting Started Kit (Order code BR-1008-36)

- Sensor Chip CM5 (not included in the Getting Started Kit, Order code BR-1000-12; pack of 3)

- Amine Coupling Kit (not included in the Getting Started Kit, Order code BR-1000-50)

- Micropipettes and tips; 2 to 10 µl, 10 to 100 µl and 100 to 1000 µl

- One 15 ml sample tube

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- Measuring cylinders or volumetric flasks; 25 ml and 250 ml
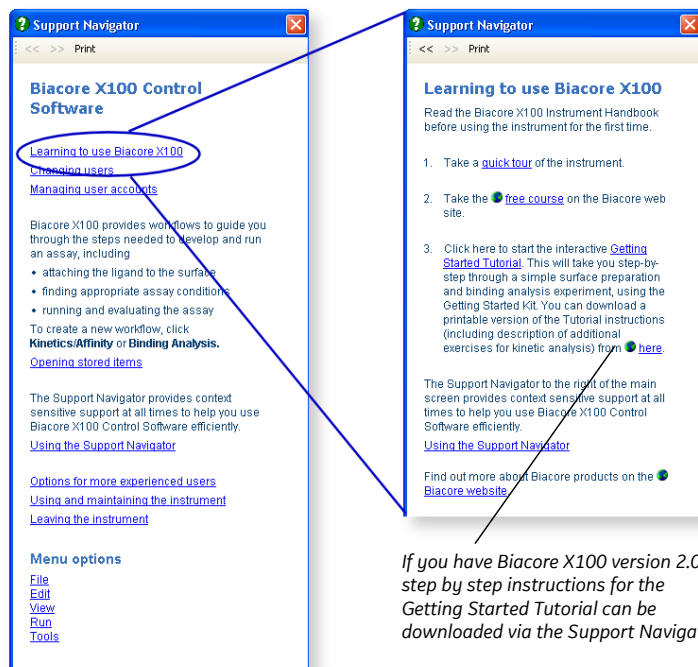- Deionized, filtered (0.22 µm) and degassed water

Start the Tutorial

Getting Started Tutorial is started from the introductory page in the Support Navigator of Biacore X100 Control Software. All instructions are dynamically linked to each step in the software and guide you through instrument startup, reagent preparation and software usage. We recommend that you go through the entire tutorial on one occasion. This will take approximately 3 to 4 hours including reagent preparations and instrument run time.

Step	Action
1	You should switch on the system about 30 minutes or more before running the tutorial to allow the temperature at the flow cell to stabilize.
2	Start Biacore X100 Control Software by clicking on the Start menu and select Biacore X100 Control Software from the Biacore folder in the Programs menu. Enter your user name and password.

Step	Action
3	Click on Learning to use Biacore X100 in the Support Navigator. If the Support Navigator is not displayed, click on Help in the tool bar and choose Show.

If you have Biacore X100 version 2.0, step by step instructions for the Getting Started Tutorial can be downloaded via the Support Navigator.

4	Follow the instructions on the screen to complete the Getting Started Tutorial. You can download a printable version of the Tutorial instructions, including description of additional exercises for kinetic analysis, by clicking on the link in the Support Navigator.

Contents of the Getting Started Kit

The contents of the Getting Started Kit are listed in *Table 1, on page 4*. Dilute 10X HBS-EP+ running buffer, ligand and analyte should be diluted as described in the Getting Started Tutorial in Biacore X100 Control Software and used immediately after dilution. Other solutions are ready for use.

The reagents in the Getting Started Kit are for in vitro and training purposes only and are supplied in quantities allowing for two repeated tutorial runs, following the instructions in Biacore X100 Software. Cytiva can accept no responsibility for results obtained with these reagents in any other context.

Table 1: Contents of the Getting Started Kit. For in vitro use only. The reagents should be stored between +4°C to +8°C and should be used within one week of opening.

Reagent/Item, quantity	Specification
10X Running buffer (50 ml)	10X HBS-EP+ buffer; 0.1 M HEPES pH 7.4, 1.5 M NaCl, 30 mM EDTA, 0.5% (v/v) Surfactant P20
Ligand (50 µl)	Monoclonal mouse-anti-human β2-microglobulin
Analyte (50 µl)	Human β2-microglobulin
Immobilization buffer (1 ml), 2 pcs	10 mM sodium acetate, pH 5.0
Regeneration solution (1 ml), 2 pcs	10 mM glycine-HCl, pH 2.5
Plastic vials and ventilated caps, 25 pcs of each	1.5 ml polypropylene microvials and ventilated kraton G (SEBS) rubber caps
Water vials, 2 pcs	4 ml polypropylene microvials

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