Series S Sensor Chip CM3

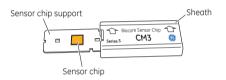
Product description

Order code: BR-1005-36 (package of three sensor chips)

29104990 (package of one sensor chip)

Storage: The use-before date applies to chips stored at +2 to 8°C in

unopened pouches.



The sensor chip is fixed to a polystyrene support sheath. Each cassette, consisting of a sensor chip and sheath assembly, is individually packed under a nitrogen atmosphere in a sealed pouch.

Note: For in vitro use only.



Application areas

Series S Sensor Chip CM3 is designed for interaction analysis in Biacore systems. The surface has a carboxymethylated dextran matrix covalently coupled to a surface coating on a gold film. Ligands ranging from small molecules to proteins, nucleic acids and carbohydrates may be attached via covalent coupling using well-established chemistries. Alternatively, a capturing molecule may be coupled for subsequent capture.

Series S Sensor Chip CM3 has a shorter dextran matrix than Sensor Chip CM5. This may be an advantage for example in work with large molecules, such as virus particles or cells. Non-specific binding may be reduced for some samples.

Due to the shorter dextran matrix, immobilization levels will typically be around 30% of those obtained on Sensor Chip CM5 under comparable conditions.

Refer to www.gelifesciences.com/biacore for updates on applications and scientific publications.

Preparations for use

Step Action 1 If you are working in a humid environment, allow the sealed sensor chip pouch to equilibrate at room temperature for 15 to 30 minutes in order to prevent condensation on the chip surface. 2 Prepare the Biacore instrument with running buffer. The buffer should be filtered (0.22 µm), and degassed for systems that do not have an integrated buffer degasser. 3 Open the sensor chip pouch. Make sure that the sensor chip support remains fully inserted into the sheath at all times to protect the chip from dust particles. Dock the sensor chip in the instrument as described in the 4 instrument handbook Note: Sensor chips that are not docked in the instrument should be stored in closed containers.

Immobilizing the ligand

The ligand or capturing molecule is covalently bound to the sensor chip surface via carboxyl groups on the dextran. Functional groups on the molecule that can be used for coupling include -NH $_2$, -SH, -CHO, -OH, and -COOH.

Refer to *Biacore Sensor Surface Handbook* for more information on immobilization strategies and procedures.

Interaction analysis

Interaction analysis is performed by injection of samples over the sensor chip surface. The covalently immobilized molecule either participates directly in the interaction under study or is used for affinity capture of one of the interacting molecules.

Refer to Biacore handbooks and www.gelifesciences.com/biacore for details on experimental protocols and methodology.

Regeneration

Regeneration of the immobilized ligand may be performed by selective dissociation of the bound analyte. Conditions should be chosen to achieve complete dissociation of the analyte without affecting the binding characteristics of the ligand. The surface of Series S Sensor Chip CM3 is resistant to a wide range of agents for this purpose (for more information see *Chemical resistance*, on page 4). The choice of regeneration procedure may be limited by the stability of the ligand.

Refer to *Biacore Sensor Surface Handbook* for more detailed information on regeneration strategies.

22-0607-31 AF 3

Chemical resistance

The surface of Series S Sensor Chip CM3 is resistant to 1-minute pulses of many commonly used agents.

Agent	Concentration
Acetonitrile	30%
DMSO	10%
DTE	0.1 M
EDTA	0.35 M
Ethanol	70%
Ethanolamine	1 M
Ethylene glycol	100%
Formamide	40%
Formic acid	20%
Glycine pH 1.5 to 3.0	100 mM
HCI	100 mM
Imidazole	300 mM
MgCl ₂	4 M
NaOH	100 mM
NaCl	5 M
SDS	0.5%
Surfactant P20	5%
Urea	8 M

4 22-0607-31 AF

For local office contact information, visit www.gelifesciences.com/contact

GE Healthcare UK Limited Amersham Place Little Chalfont Buckinghamshire, HP7 9NA United Kingdom

www.gelifesciences.com/sampleprep

 $\ensuremath{\mathsf{GE}}$ and $\ensuremath{\mathsf{GE}}$ monogram are trademarks of General Electric Company.

Biacore is a trademark of General Electric Company or one of its subsidiaries.

© 1999-2014 General Electric Company – All rights reserved. First published Oct. 1999

All goods and services are sold subject to the terms and conditions of sale of the company within GE Healthcare which supplies them. A copy of these terms and conditions is available on request. Contact your local GE Healthcare representative for the most current information.

GE Healthcare Bio-Sciences AB Björkgatan 30, 751 84 Uppsala, Sweden

GE Healthcare Europe GmbH

Munzinger Strasse 5, D-79111 Freiburg, Germany GE Healthcare Bio-Sciences Corp.

800 Centennial Avenue, P.O. Box 1327, Piscataway, NJ 08855-1327, USA

GE Healthcare Japan Corporation Sanken Bldg. 3-25-1, Hyakunincho Shinjuku-ku, Tokyo 169-0073, Japan

