Series S Sensor Chip CM7

Product description

Order code:	29147020 (Package of three sensor chips) 28953828 (Package of one sensor chip)
Contents:	Series S Sensor Chip CM7
Storage:	The use-before date applies to chips stored at 4°C to 8°C in unopened pouches.



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

Note: For in vitro use only.



Application areas

Series S Sensor Chip CM7 is intended for interaction analysis in Biacore systems. The surface has a carboxymethylated dextran matrix covalently attached to a gold film, with similar chemical properties to Sensor Chip CM5 but prepared to provide a higher immobilization capacity.

Series S Sensor Chip CM7 is designed primarily for work with low molecular weight analytes. With macromolecular analytes, the analyte binding capacity (R_{max}) is lower than expected on the basis of the amount of ligand immobilized, possibly because of multi-site attachment of the ligand and matrix crosslinking on the higher capacity surface.

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. If the chip is not inserted into the instrument immediately, it should be stored in a plastic bag.
4	Dock the sensor chip in the instrument as described in the Instrument Handbook.

Immobilizing the ligand

The ligand 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.

For more detailed information on immobilization strategies and procedures, refer to the *Biacore Sensor Surface Handbook*.

Interaction analysis

Interaction analysis is performed by injection of samples over the sensor chip surface. Analyte molecules in the injected sample bind directly to the covalently immobilized ligand.

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

Regeneration

Regeneration of the immobilized ligand is performed by 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 CM7 is resistant to a wide range of agents for this purpose (see *Chemical resistance, on page 6*). The choice of regeneration procedure may be limited by the stability of the ligand. Do not use harsher conditions than required to remove the analyte.

For more detailed information on regeneration strategies, refer to the *Biacore Sensor Surface Handbook*.

Chemical resistance

The surface of Series S Sensor Chip CM7 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-HCl pH 1.5 to 3.0	100 mM
Glycine-NaOH pH 9.5 (BIAdesorb Solution 2)	50 mM
Guanidine hydrochloride	6 M
HCI	100 mM
Imidazole	300 mM
MgCl ₂	4 M
NaOH	100 mM
NaCl	5 M
SDS (BIAdesorb Solution 1)	0.5%
Surfactant P20	5%
Urea	8 M

Page intentionally left blank

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/biacore

GE and GE monogram are trademarks of General Electric Company.

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

All other third party trademarks are the property of their respective owner.

© 2009 - 2015 General Electric Company – All rights reserved. First published Oct. 2009

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



28-9578-66 AB 04/2015 a22