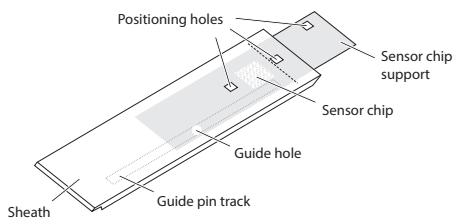


# Sensor Chip CM5

## Instructions

### Product description

Order code:	29149604 (Package of ten sensor chips) BR100012 (Package of three sensor chips) BR100399 (Package of one sensor chip)
Content:	Sensor Chip CM5
Storage:	The use-before date applies to chips stored at 2°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

Sensor Chip CM5 is intended for interaction analysis in Biacore™ systems. The surface has a carboxymethylated dextran matrix covalently 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.

Sensor Chip CM5 is suitable for most general applications.

Refer to [cytiva.com/biacore](https://www.cytiva.com/biacore) for updates on applications and scientific publications.

# Preparations for use

Step	Action
1	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.
4	Dock the sensor chip in the instrument as described in the Instrument Handbook.
5	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<sub>2</sub>, -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. 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 [cytiva.com/biacore](https://www.cytiva.com/biacore) for details on experimental protocols and methodology.

## Regeneration

Regeneration of the immobilized ligand is 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 choice of regeneration procedure may be limited by the stability of the ligand.

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

## Chemical resistance

The surface of Sensor Chip CM5 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
HCl	100 mM
Imidazole	300 mM
MgCl <sub>2</sub>	4 M
NaOH	100 mM
NaCl	5 M
SDS (BIAdesorb Solution 1)	0.5%
Surfactant P20	5%
Urea	8 M

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