

# Octet<sup>®</sup> SPR MAR Sensor Chip



## Overview

Suitable for almost all Octet<sup>®</sup> SPR assays, the Octet<sup>®</sup> SPR MAR sensor chip is comprised of a 3D carboxymethylated dextran matrix sensor chip surface. Molecules of interest can be covalently bound to the surface using a range of different amine, aldehyde, thiol or carboxyl functional groups.

The Octet<sup>®</sup> SPR MAR sensor chip is one of the most widely used Octet<sup>®</sup> SPR sensor chips due to its versatility and high binding capacity, making it suitable for many diverse applications from small fragment research to large, complex molecular structures.

Learn More: [www.sartorius.com/octet-spr](http://www.sartorius.com/octet-spr)

## Information

- Upon arrival store Octet® SPR MAR sensor chips in the unopened package at the temperature indicated on the packaging.
- Octet® SPR MAR sensor chips are provided individually packed and are sealed in a nitrogen atmosphere. Therefore, it is recommended that sensor chips are used as soon as possible after opening the package.
- The Octet® SPR MAR sensor chip is supplied within a protective outer cassette that shields the chemistry from direct handling as any physical contact with the surface can adversely affect sensor chip performance.

## Features and Benefits

### Capacity and Surface

- High binding capacity
- Produces a highly stable covalent bond

### Analytes and Ligands

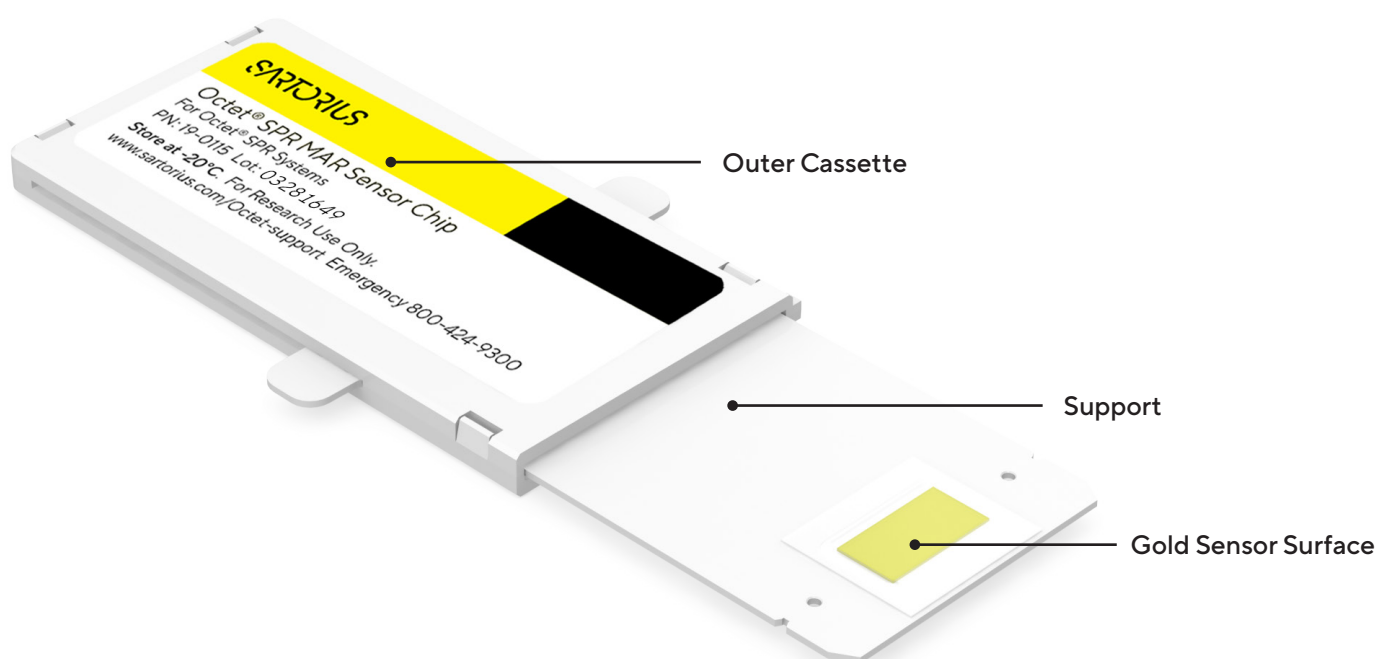
- Biocompatible with a wide range of molecules
- Small molecules: fragments and organic compounds
- Large molecules and proteins
- Target interactions with low and high binding affinities

## Sensor Chip Install/Uninstall

Prior to installation, move the sensor chip to room temperature and allow to equilibrate without opening the packet (~10 mins). Once equilibrated to room temperature the sensor chip is ready for installation.

- Open the sensor chip packet, ensuring that the sensor chip surface is not touched, as the surface chemistry on the sensor chip can be damaged if touched.
- Install the sensor chip as directed by the onscreen software prompts.
- For further information on sensor chip preparation refer to the [Best Practice Guide: Octet® SPR Sensor Chip Preparation](#) and [Octet® SPR Discovery User Guide](#) for additional information.

**IMPORTANT:** For best performance of the sensor chip, installation should be performed when the analysis chamber temperature is above 20 °C. Uninstallation should be performed when the analysis chamber temperature is below 30 °C. The control software will automatically enforce these constraints. After installation/uninstallation, the analysis temperature can be adjusted as desired.



## Ligand Immobilization

Covalent immobilization to sensor chips is the most frequently used approach and is the method of choice for attaching affinity capture molecules, such as antibodies, protein A, protein G or protein A/G. The Octet® MAR sensor chip is the basis for many different immobilization chemistries such as:

- Amine coupling—Carboxyl groups on the sensor chip surface are activated using EDC/NHS to generate reactive succinimide esters. Ligands containing primary amines are then injected over the activated surface to react with the ester and form a stable covalent bond.
- Thiol coupling—Thiol-disulfide exchange between thiol groups and active disulfides introduced on the ligand or sensor matrix. Thiol-maleimide coupling involves a similar scheme between thiol groups and maleimide groups on the ligand or sensor matrix.

Refer to Octet® SPR Chemistry User Guide for more information on different immobilization techniques and methods.

## Ordering Information


Order No.	Description
19-0115	Pack of three sensor chips

### Germany

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