Sensor Chip Buyer's Guide

What We Offer

Reichert supplies a wide selection of sensor chips with different surface matrices that are suitable for a variety of applications. Whether you are carrying out a traditional biomolecular interaction analysis experiment or a more specialized assay (e.g., studying cell lysates, serum, or whole cells), Reichert has the sensor chip you need.

Which Sensor Chip is Right for Your Experiment?

With this overview, Reichert makes it easy to determine which sensor chip to choose. Determine the specific requirements of your application and then order the sensor chips needed to carry out your experiments.

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Selecting the Right Sensor Chip

Consider the following 6 items, then look on the next page for more details.

1 Application

Choose the sensor chip you want to use based on the type of experiment you are planning. Generally, planar chips can be used when studying protein-protein interactions. Dextran or other hydrogels can be used for either protein-small molecule or protein-protein interactions.

2 Does the Target Have a Tag?

Specific chips available include Streptavidin or NeutrAvidin for targets with a biotin tag and Ni-NTA for chips with a His-tag. Capturing via a tag has the potential advantage of being able to choose exactly where on the molecule the target is coupled to the chip. In some cases, it can also facilitate reuse of the chip if the target is removed after each sample injection.

3 Are You Working With Lipids?

A hydrophobic chip works best for capturing lipids. These chips are usually simple to regenerate using 20mM CHAPS.

4 Are You Interested in Capturing Antibodies?

Consider using a Protein A chip. Protein A contains four high affinity binding sites capable of binding to the Fc region from IgG of several species including human and rabbit.

5 Do You Need a Surface You Do Not See Listed?

We make most custom coatings. Contact us for more details.

6 Plain Gold Chips

We sell plain gold sensor chips for users that want to add their own surface coatings. These chips can also be used for SPR-Electrochemistry experiments.

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Choose the Right Sensor Chip

Chip Type	Surface	Capacity	General Use	Types of Compounds Typically Studied
Dextran	Carboxymethyl Dextran Hydrogel	High	Large/medium sized molecules and low molecular weight molecules	Proteins, Antibodies,Nucleic Acids, Carbohydrates, Small Molecules
Planar Mixed SAM	Planar PEG with 10% COOH	Low	Large/medium sized molecules along with viruses and cells	Proteins, Antibodies, Nucleic Acids, Carbohydrates, Cells
Streptavidin	Streptavidin	Low or High	Capture of biotinylated molecules	Biotin tagged Proteins, Antibodies, Nucleic Acids
NeutrAvidin	NeutrAvidin	Low or High	Capture of biotinylated molecules	Biotin tagged Proteins, Antibodies, Nucleic Acids
Ni/NTA	Nickel NTA	Low or High	Capture of Poly His-tagged molecules	His-tagged proteins
Hydrophobic	Planar Hydrophobic Surface	Low	Capture of Lipid Monolayers	Lipids, Membranes
Protein A	Planar Protein A	Low	Capture Fc region from IgG of several species including human and rabbit	Antibodies
Polycarboxylate Hydrogel	Polycarboxylate Hydrogel	High	Large/medium sized molecules and low molecular weight molecules	Proteins, Antibodies, Nucleic Acids, Carbohydrates
Plain Gold	Bare Gold	Application specific	User defined chemistry	Depends on surface added

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