

Reacti-Bind™ Streptavidin Coated 96-Well Plates

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| Number | Description |
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| 15120 | Reacti-Bind™ Streptavidin Coated Plate (clear, 8-well strips), 5 plates |
| 15122 | Reacti-Bind™ Streptavidin Coated Plate (clear, 8-well strips), 5 × 5 plates |
| 15124 | Reacti-Bind™ Streptavidin Coated Plate (clear, 96-well), 5 plates |
| 15126 | Reacti-Bind™ Streptavidin Coated Plate (clear, 96-well), 5 × 5 plates |
| 15118 | Reacti-Bind™ Streptavidin Coated Plate (white, 96-well), 5 plates |
| 15119 | Reacti-Bind™ Streptavidin Coated Plate (black, 96-well), 5 plates Blocking Buffer: These plates are supplied blocked with SuperBlock® Blocking Buffer Binding Capacity: ~5 pmol D-biotin/well Activation Level: 100 µl |
| 15121 | Reacti-Bind™ Streptavidin Coated Plate (clear, 8-well strips), 5 plates |
| 15125 | Reacti-Bind™ Streptavidin Coated Plate (clear, 96-well), 5 plates |
| 15218 | Reacti-Bind™ Streptavidin Coated Plate (white, 96-well), 5 plates |
| 15219 | Reacti-Bind™ Streptavidin Coated Plate (black, 96-well), 5 plates Blocking Buffer: These plates are supplied blocked with Blocker™ BSA Binding Capacity: ~10 pmol D-biotin/well Activation Level: 200 µl |

Storage: Upon receipt store plates at 4°C in unopened pouches. Once opened, place unused plates in a resealable bag with desiccant and store at 4°C. Plates are shipped at ambient temperature.

Introduction

The Reacti-Bind™ Streptavidin Coated Plates are made of polystyrene and are ideal for binding assays using biotinylated molecules. These plates are especially advantageous when direct adsorption to polystyrene plates denatures antibodies or the target molecule. Streptavidin has no carbohydrate groups and an isoelectric point of 5-6, resulting in low nonspecific interactions. The Reacti-Bind™ Streptavidin Coated Plates are available in clear for colorimetric assays, white for chemiluminescent assays, and black for fluorescent assays.

Example ELISA Procedure

The following protocol describes a generalized enzyme-linked immunosorbent assay using a biotinylated capture antibody. Please see the reference list for other possible applications using streptavidin-coated microplates.

A. Materials Required

- Wash Buffer: Tris-buffered saline (25 mM Tris, 150 mM NaCl; pH 7.2; Product No. 28376), 0.1% BSA, 0.05% Tween® -20; alternatively, use Blocker™ BSA (Product No. 37520) supplemented with 0.05% Tween® -20
- Biotinylated capture antibody adjusted to 10 µg/ml, or other appropriate concentration, with Wash Buffer

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- Antigen adjusted to appropriate concentration with Wash Buffer
- Primary antibody adjusted to appropriate concentration with Wash Buffer
- Enzyme-labeled secondary antibody adjusted to appropriate concentration with Wash Buffer
- Appropriate enzyme substrate: example substrates are the TMB Substrate Kit (Product No. 34021) for horseradish peroxidase and the Phosphatase Substrate Kit (Product No. 37620) for alkaline phosphatase

B. Method

1. Wash each well three times with 200 µl of Wash Buffer. Add 100 µl of the biotinylated capture antibody to each well and incubate for 2 hours with shaking at room temperature.
2. Wash each well three times with 200 µl of Wash Buffer. Make a serial dilution of the antigen and add 100 µl to each well. Incubate plate for 30 minutes with shaking at room temperature.
3. Wash each well three times with 200 µl of Wash Buffer. Add 100 µl of the primary antibody to each well and incubate plate for 30 minutes at room temperature.
4. Wash each well three times with 200 µl of Wash Buffer. Add 100 µl of the enzyme-labeled secondary antibody to each well. Incubate plate for 30 minutes with shaking at room temperature.
5. Wash each well three times with 200 µl of Wash Buffer.
6. Follow the manufacturer's instructions for the specific detection system.

Procedure for Determining Binding Activity of the Coated Plates

The binding activity of the plates can be tested using Biotinylated Alkaline Phosphatase (Product No. 29339) and PNPP (Product No. 37620) or Biotinylated Horseradish Peroxidase (Product No. 29139) and TMB (Product No. 34021).

1. Rinse each well with three times with 200 µl of wash buffer (e.g., TBS).
2. Prepare a 1 mg/ml solution of the biotinylated enzyme. Make 1:2 serial dilutions using a 1:1,000 dilution for the first well. Incubate the wells for 1 hour at room temperature.
3. Wash each well three times with 200 µl of TBS containing 0.05% Tween[®]-20.
4. Incubate with 100 µl of substrate solution for 15 minutes at room temperature.
5. Measure the absorbance of each well. Active plates result in an absorbance of 0.5 to 1.0 OD at 405 nm.

Related Pierce Products

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| 37070 | SuperSignal[®] ELISA Pico Chemiluminescent Substrate , 100 ml, peroxidase substrate |
| 15169 | QuantaBlu[™] Fluorogenic Peroxidase Substrate Kit |
| 34028 | 1-Step[™] Ultra TMB-ELISA , 250 ml, colorimetric peroxidase substrate |
| 37621 | 1-Step[™] PNPP , 100 ml, colorimetric phosphatase substrate |
| 29339 | ImmunoPure[®] Biotinylated Alkaline Phosphatase , 1 mg |
| 29139 | ImmunoPure[®] Biotinylated Horseradish Peroxidase , 5 mg |
| 15075 | ImmunoWare[™] Reagent Reservoirs , 200/pkg. |
| 15082 | ImmunoWare[™] Microtube Racked System , 960 tubes |
| 15036 | Sealing Tape for 96-Well Plates , 100/pkg. |
| 45360 | Seize[®] Streptavidin Coated Plate Immunoprecipitation Kit |
| 21425 | EZ-Link[®] Sulfo-NHS-Biotinylation Kit |
| 21335 | EZ-Link[®] Sulfo-NHS-LC-Biotin , 100 mg, biotinylation reagent with 22.4 Å spacer arm |

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