



050PR-03

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A Geno Technology, Inc. (USA) brand name

# Well-Coated™ Biotin

96-Well Plate Coated With Biotin for Binding Avidin,  
Streptavidin or Neutraavidin™ Conjugated Molecules

(Cat. # 786-746, 786-747, 786-762, 786-763)



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## INTRODUCTION

Well-Coated™ Biotin plates are designed to specifically bind avidin, streptavidin or Neutravidin™ conjugated molecules, including enzyme conjugates.

Biotin exhibits an extraordinary binding affinity for avidin ( $K_a=10^{15}M^{-1}$ ) and streptavidin ( $K_a=10^{15} M^{-1}$ ). Biotin and avidin interaction is rapid and once the bond is established it can survive up to 3M guanidine-hydrochloride and extremes of pH. Biotin-avidin bonds can only be reversed by denaturing the avidin protein molecule with 8M guanidine-hydrochloride at pH1.5 or by autoclaving. Streptavidin and Neutravidin™ in many respects are similar to avidin except that they have no carbohydrate and their solubility in aqueous buffer is much lower than avidin. Neutravidin™ also lacks the RYD sequence eliminating interaction with RGD domain of adhesion receptors. The binding of streptavidin and Neutravidin™ is similar to that of avidin, but with less non-specific binding.

The wells are coated to a 200µl depth and are supplied pre-blocked in our proprietary Superior™ Blocking Buffer. The plates are protected with our WellCoat™ Stabilizer (Cat. # 786-1217) that creates a protective layer over the immobilized agents. The reagent will not interfere with the assay and has no effect of the efficiency or capacity of the wells. The WellCoat™ Stabilizer offers greater protection and shelf life of the plates. In some cases, the protective layer may give the appearance of a white coating. The plates have the capacity to bind 30-50ng streptavidin per well. The clear, white and black plates are offered for colorimetric, chemiluminescence and fluorescent detection systems, respectively.

## ITEM(S) SUPPLIED

Cat. #	Components	Size
786-747	Well-Coated™ Biotin Coated 8-well strip plate, Clear	5 plates
786-762	Well-Coated™ Biotin Coated 96 well plate, Black	5 plates
786-763	Well-Coated™ Biotin Coated 96 well plate, White	5 plates

## STORAGE CONDITIONS

Shipped at ambient temperature. Upon arrival, store unopened at 4°C. Once opened the plates can be stored in a resealable bag (ZipLoc) with an appropriate desiccant at 4°C.

## SPECIFICATION

- Bind 30-50ng streptavidin per well

## PROTOCOL

The following protocol is a simple direct ELISA protocol and the protocol and reagents used will have to be optimized for specific applications and assays.

## ADDITIONAL ITEM(S) REQUIRED

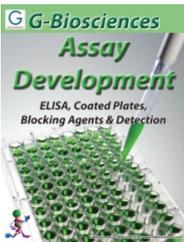
- Avidin, streptavidin or Neutravidin™ enzyme conjugated molecules (0.2-1µg/ml)
- Wash Buffer: femtoTBST™ (Cat. # 786-161) or femtoPBST™ (Cat. # 786-162); 10X concentrated wash buffers supplemented with Tween® 20. Or an appropriate wash buffer of choice.
- Blocking Buffer: A suitable blocking buffer, we recommend our Superior™ Blocking Buffer (Cat. # 786-655 to 786-661) or NAP-BLOCKER™, an animal free blocking agent suitable for ELISA (Cat. # 786-190).
- Detection system, femtoELISA™ is a chromogenic detection system for HRP and AP (Cat. # 786-110 to 786-113)

### Direct ELISA Assay

1. Wash the wells to be used three times with 300µl Wash Buffer.
2. Add up to 200µl avidin, streptavidin or Neutravidin™ conjugated molecules to each well.
3. Incubate at room temperature for 1 hour, for optimal binding use a plate shaker.
4. Wash each well three times with 300µl Wash Buffer.
5. Detect the label signal according to the manufacturer's instructions, using 200µl detection reagent per well.

## RELATED PRODUCTS

Download our Assay Development Handbook.



<http://info.gbiosciences.com/complete-assay-development-handbook>

For other related products, visit our website at [www.GBiosciences.com](http://www.GBiosciences.com) or contact us.

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