



A Geno Technology, Inc. (USA) brand name

Well-Coated™ Amine Binding

96-Well Plates for Binding Peptide & Protein Amine Groups

(Cat. # 786-753, 786-756, 786-757)



INTRODUCTION

Well-Coated[™] Amine Binding plates are designed to specifically bind primary amines of peptides, proteins and other molecules. The Well-Coated[™] Amine Binding plates are designed to overcome the inherent issues of passive adsorption for immobilizing peptides and other ligands for binding assays.

Well-Coated[™] Amine Binding plates are maleic anhydride activated plates that react with primary amines to form amide bonds that are stable at pH≥7. Acidic conditions will hydrolyze the bonds releasing the peptide/ligand, therefore binding of peptide/ligand to plates should be performed at pH8-9 and the binding assays or ELISA should be performed at pH≥7.

The wells are coated to a 200µl depth. The clear, white and black plates are offered for colorimetric, chemiluminescence and fluorescent detection systems, respectively.

ITEM(S) SUPPLIED

Cat. #	Components	Size
786-753	Well-Coated [™] Amine Binding, 8-well strip plate, Clear	5 plates
786-756	Well-Coated [™] Amine Binding, 96 well plate, Black	5 plates
786-757	Well-Coated [™] Amine Binding, 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.

BINDING CAPACITY

Well-Coated [™] **Amine Binding:** ~130pmol HOOK [™] Biotin Pentylamine (Cat. # BG-15)/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 Items Required

- Binding Buffer: PBS or Carbonate/Bicarbonate Buffer, pH8-9. Do not use Tris based or other amine containing buffers, as these will block the binding sites.
- Peptide, protein or other ligand with free primary amine
- 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).
- Labeled Antigen, visit <u>www.GBiosciences.com</u> for horseradish peroxidase (HRP), alkaline phosphatase (AP) and biotin labeling kits.
- 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 ultrapure water.
- Dilute the peptide to 1-20μg/ml in Binding Buffer, pH8-9. Add up to 200μl to each well.
 - **NOTE:** The amount of peptide to be added needs to be optimized by using various peptide concentrations.
- 3. Incubate at room temperature for 60 minutes at 37°C, for optimal binding use a plate shaker and incubate overnight.
- 4. Remove the peptide solution and block the unreacted sites by incubating with 300µl Blocking Buffer for 60 minutes at room temperature.
- 5. Wash each well three times with 300µl Wash Buffer.
- 6. Continue with the ELISA or other assay.

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 or contact us.



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