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A Geno Technology, Inc. (USA) brand name

Well-Coated™ Cobalt

96-Well Plates Coated with Cobalt for
Binding 6X His Tagged Proteins

(Cat. # 786-927, 786-928, 786-929)



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INTRODUCTION

Well-Coated™ Cobalt plates are designed to specifically bind 6X histidine (polyhistidine) tagged proteins and peptides. The plates can be used for the isolation of polyhistidine-tagged proteins direct from bacterial lysates and then used for subsequent ELISA protocols.

The wells are coated to a 200µl depth and are supplied pre-blocked in our proprietary Superior™ Blocking Buffer. The clear, white and black plates are offered for colorimetric, chemiluminescence and fluorescent detection systems, respectively.

KIT COMPONENTS

Cat. #	Components	Size
786-927	Well-Coated™ Cobalt 8-well strip plate, Clear	5 plates
786-928	Well-Coated™ Cobalt 96 well plate, Black	5 plates
786-929	Well-Coated™ Cobalt 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 an air tight, resealable bag with an appropriate desiccant at 4°C.

BINDING CAPACITY

Well-Coated™ Cobalt: ~9pmol His-tagged protein/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.

IMPORTANT

- Avoid using buffers that contain EDTA or other metal chelators, avoid reducing agents and avoid imidazole.
- Binding efficiency of His-tagged proteins may be affected by steric hindrance, micro-environment, pH, ionic strength and other factors. To overcome steric hindrance/ protein folding issues the binding can be performed in 8M urea, 6M guanidine·HCl or 3M thiocyanate.

ITEMS NEEDED BUT NOT SUPPLIED

- 6X His tagged protein cell lysate
- Dilution Buffer: Tris buffered saline (TBS, Cat. # 786-288) or phosphate buffered saline (PBS, Cat. # 786-289).
- Wash Buffer: femtoTBS[™] (Cat. # 786-161) or femtoPBST[™] (Cat. # 786-162); 10X concentrated wash buffers supplemented with Tween[®] 20. Or an appropriate wash buffer of choice.
- Enzyme Labeled Primary Antibody against the polyhistidine tagged protein; visit www.GBiosciences.com for horseradish peroxidase (HRP) and alkaline phosphatase (AP) 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 two times with 300µl Wash Buffer.
2. Dilute the cell lysate with Dilution Buffer and add up to 200µl to each well.
3. Incubate at room temperature for 1-2 hours, for optimal binding use a plate shaker.
4. Wash each well three times with 300µl Wash Buffer.
5. Add 200µl enzyme labeled primary antibody.
6. Incubate at room temperature for 0.5-1 hour with shaking.
7. Wash each well three times with 300µl Wash Buffer.
8. 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 or contact us.

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