



Protein L Gold NanoUrchins PRODUCT DATA SHEET

Protein L Gold NanoUrchins

Description

Recombinant Protein L is a bacterial protein (from *Peptostreptococcus magnus*) that binds to the kappa light chains of IgG-type antibodies. However, it does not bind to lambda light chains. As such, Protein L gold conjugates allow for convenient and quick conjugation of antibodies containing a kappa chain to the gold surface, which can then be utilized further downstream. An advantage of Protein L over Protein A and Protein G is that it is capable of binding to single-chain antibody fragments (scFv) and Fab fragments, allowing for finer optimization.

Abvigen Protein L conjugated gold NanoUrchins are suitable for use in lateral flow, immunoblotting, light microscopy, electron microscopy applications, and other procedures for detection of antibody-labelled samples.

For custom sizes, formulations or bulk quantities please contact our customer service department.

Website: www.abvigen.com Phone: +1 929-202-3014 Email: info@abvigenus.com

Product List

Cat No	Product Name	Concentration	Size
ABPLGNU-50	Protein L Gold NanoUrchins, 50 nm	OD 3	0.5 mL
ABPLGNU-60	Protein L Gold NanoUrchins, 60 nm	OD 3	0.5 mL
ABPLGNU-70	Protein L Gold NanoUrchins, 70 nm	OD 3	0.5 mL
ABPLGNU-80	Protein L Gold NanoUrchins, 80 nm	OD 3	0.5 mL
ABPLGNU-90	Protein L Gold NanoUrchins, 90 nm	OD 3	0.5 mL
ABPLGNU-100	Protein L Gold NanoUrchins, 100 nm	OD 3	0.5 mL



Characteristics

Core diameter: 50 ~ 100 nm

Concentration: 0.15 mg/ml (@ OD=3)

Conjugated Protein: Protein L from *Peptostreptococcus magnus*. (expressed in *E. coli*)

Storage Buffer: 10 mM PBS (pH 7.4), 20% glycerol (v/v), 1% BSA

Working Dilution: 1:10 – 1:100 (application dependent, optimization might be required)

Advantages

Sensitive probe for detection of human and mouse antibodies containing kappa light chains.

Binds to a broader range of immunoglobulin classes compared to Protein A or Protein G. These include IgG, IgM, IgA, IgE and IgD.

Binds single-chain variable fragments (scFv) and Fab fragments that contain kappa light chains.

Does not bind goat or bovine IgG which makes it ideal for the specific detection of human and mouse antibodies produced in tissue culture medium containing Fetal Bovine Serum (FBS).

Applications

Protein L gold nanourchin conjugates are suitable for use in immunoblotting, light microscopy, and electron microscopy applications.

Storage

Store undiluted in storage buffer at 2-8°C. Stable for 4 months if stored as specified.

DO NOT FREEZE.

Storage of conjugate at working dilution may result in performance loss.

Standard Immunogold Dot-Blot Protocol

(Adapted from Moeremans et al.)

1. Spot one microlitre drops of a serial dilution of your protein (1 ug-1 ng) in PBS supplemented with 0.5 ug/ml of BSA on nitrocellulose or PVDF membrane.
2. Let protein drops dry into the membrane.
3. Block Membrane for 30 min using 1% (w/v) dry milk in 1X PBS at room temperature.
4. Incubate with primary antibody for 2 h at room temperature.
5. Wash membrane 3x5 min with blocking solution prepared as above.



6. Incubate for 2 h (or longer for increased sensitivity) with secondary gold conjugate diluted 1:10 (OD=0.3) times with blocking solution (0.2% Blocking Solution).
7. Wash 3x5 min as above.
8. Dry membrane and record data.
9. (OPTIONAL) Proceed with silver enhancement to improve sensitivity.

Notes

This product is for R&D use only, not for drug, household, or other uses.

Ordering Information

Website: www.abvigen.com

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