



## Protein G Gold NanoUrchins PRODUCT DATA SHEET

### Protein G Gold NanoUrchins

#### Description

Protein G is a bacterial protein that has a high affinity for the Fc region of IgG-type antibodies. As such, Protein G gold conjugates allow for convenient and quick conjugation of Fc-containing antibodies to the gold surface, which can then be utilized further downstream.

Abvigen Protein G conjugated gold NanoUrchins are suitable for use in 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](http://www.abvigen.com) Phone: +1 929-202-3014 Email: [info@abvigenus.com](mailto:info@abvigenus.com)

#### Product List

Cat No	Product Name	Concentration	Size
ABPGGNU-50	Protein G Gold NanoUrchins, 50 nm	OD 3	0.5 mL
ABPGGNU-60	Protein G Gold NanoUrchins, 60 nm	OD 3	0.5 mL
ABPGGNU-70	Protein G Gold NanoUrchins, 70 nm	OD 3	0.5 mL
ABPGGNU-80	Protein G Gold NanoUrchins, 80 nm	OD 3	0.5 mL
ABPGGNU-90	Protein G Gold NanoUrchins, 90 nm	OD 3	0.5 mL
ABPGGNU-100	Protein G 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 G from *Streptococcus sp.* (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)



## Applications

Protein G gold nanourchin conjugates are suitable for use in immunoblotting, light microscopy, SPR, 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

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