



Gold Nanoparticles-PG PRODUCT DATA SHEET

Gold Nanoparticles-PG

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 nanoparticles are suitable for use in immunoblotting, light microscopy, electron microscopy applications, and other procedures for detection of antibody-labelled samples.

Product List

Cat No	Product Name	Concentration	Size
ABGN-5-PG	Gold Nanoparticles, 5 nm-PG	0.5 mg/ml	1 mL
ABGN-10-PG	Gold Nanoparticles, 10 nm-PG	0.5 mg/ml	1 mL
ABGN-20-PG	Gold Nanoparticles, 20 nm-PG	0.5 mg/ml	1 mL
ABGN-30-PG	Gold Nanoparticles, 30 nm-PG	0.5 mg/ml	1 mL
ABGN-40-PG	Gold Nanoparticles, 40 nm-PG	0.5 mg/ml	1 mL
ABGN-50-PG	Gold Nanoparticles, 50 nm-PG	OD 50	1 mL
ABGN-60-PG	Gold Nanoparticles, 60 nm-PG	OD 50	1 mL
ABGN-70-PG	Gold Nanoparticles, 70 nm-PG	OD 50	1 mL
ABGN-80-PG	Gold Nanoparticles, 80 nm-PG	OD 50	1 mL
ABGN-90-PG	Gold Nanoparticles, 90 nm-PG	OD 50	1 mL
ABGN-100-PG	Gold Nanoparticles, 100 nm-PG	OD 50	1 mL
ABGN-150-PG	Gold Nanoparticles, 150 nm-PG	OD 50	1 mL
ABGN-200-PG	Gold Nanoparticles, 200 nm-PG	OD 50	1 mL
ABGN-500-PG	Gold Nanoparticles, 500 nm-PG	OD 50	1 mL
ABGN-1000-PG	Gold Nanoparticles, 1000 nm-PG	OD 50	1 mL
ABGN-1500-PG	Gold Nanoparticles, 1500 nm-PG	OD 50	1 mL



Characteristics

Core size range: 5 nm ~ 1500 nm

Concentration: 0.5 mg/ml, OD 50

Conjugated protein: Protein G from Streptococcus sp. (expressed in E. coli)

Working dilution: 1:10 ~ 1:100 (application dependent, optimization might be required)

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

Applications

Gold conjugates are suitable for use in immunoblotting, light microscopy, and electron microscopy applications.

Standard Immunogold Dot-Blot Protocol

(Adapted from Moeremans et al.)

1. Spot one microlitre drops of a serial dilution of your protein (1 μ g ~ 1 ng) in PBS supplemented with 0.5 μ g/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.

Storage and Stability

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

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

DO NOT FREEZE.

Notes

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



Ordering Information

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