

# **Gold Nanoparticles-GAMGF**

## Description

Goat anti-mouse secondary antibodies are produced in goat and target mouse IgG antibodies, along with their subclasses. This antibody-antibody interaction allows for the development of bio-assays and detection of mouse antibody-labelled targets. F(ab')<sub>2</sub> fragments options are available for applications needing higher specificity. Abvigen affinity isolated anti-mouse IgG F(ab')<sub>2</sub> fragment produced in goat and coupled to gold nanoparticles. Suitable for use in applications such as lateral flow, immunoblotting, light microscopy, and electron microscopy applications procedures for secondary detection of mouse antibody labeled samples.

#### **Product List**

Cat No	Product Name	Concentration	Size
ABGN-5-GAMGF	Gold Nanoparticles, 5 nm-GAMGF	OD 3	0.5 mL
ABGN-10-GAMGF	Gold Nanoparticles, 10 nm-GAMGF	OD 3	0.5 mL
ABGN-15-GAMGF	Gold Nanoparticles, 15 nm-GAMGF	OD 3	0.5 mL
ABGN-20-GAMGF	Gold Nanoparticles, 20 nm-GAMGF	OD 3	0.5 mL
ABGN-30-GAMGF	Gold Nanoparticles, 30 nm-GAMGF	OD 3	0.5 mL
ABGN-40-GAMGF	Gold Nanoparticles, 40 nm-GAMGF	OD 3	0.5 mL

## **Characteristics**

Core size range: 5 nm ~ 40 nm

Concentration: OD=3

Conjugated antibody: Goat affinity purified anti-mouse IgG - F(ab')<sub>2</sub> Fragment

Clonality: Polyclonal

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

Storage buffer: 20 mM Tris (pH 8.0), 150 mM NaCl, 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 ug  $\sim$  1 ng) in PBS supplemented with 0.5  $\mu$ 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.

#### 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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