

PRODUCT DATA SHEET

Protein G - 30nm Au20/Ag80 Alloy Conjugate (1ml)

Catalog No. AAC-30-18

Size: 1ml

Description

Protein G conjugated 30nm Au20/Ag80 Alloy nanoparticles. Suitable for use in immunoblotting, light microscopy, and electron microscopy applications.

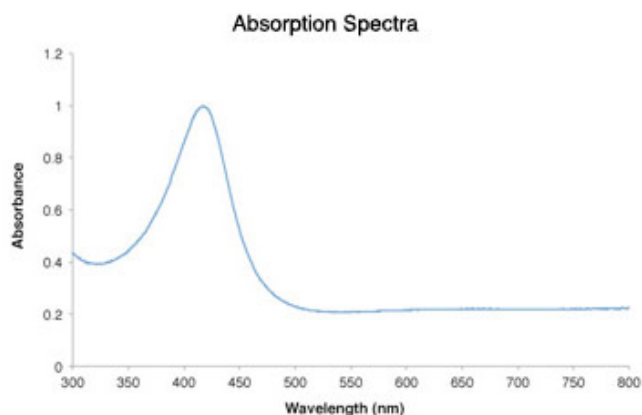
Provides a permanent and sensitive label (100pg or less) when used in conjunction with Cytodiagnostics membrane and microscopy silver enhancer kits, see related product below.

Concentration: 0.15 mg/ml (OD=3)

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

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

Working Dilution: 1:10 – 1:100



Storage

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

Product Safety and Handling

This product is for R&D use only, not for drug, household, or other uses. Please review the material safety datasheet (MSDS) available online for proper safety and handling procedures.

Related Products

Silver Enhancer Kit for Membranes Cat No. SR-01-02

Silver Enhancer Kit for Microscopy Cat No. SR-01-01

Standard Immunogold Dot-Blot Protocol

(Adapted from Moeremans et al. [1])

1. Spot one microlitre drops of a serial dilution of your protein (100-0.1ng) in PBS supplemented with 50ug/ml of BSA on nitrocellulose or PVDF membrane.
2. Let protein drops dry into the membrane.
3. Block Membrane for 30 minutes using 1% (w/v) dry milk in 1X PBS at room temperature.
4. Incubate with primary antibody for 2 hours at room temperature.
5. Wash membrane 3x5 minutes with blocking solution prepared as above.
6. Incubate for 2 hours (or longer for increased sensitivity) with secondary alloy conjugate diluted 1:10 (OD=0.3) times with blocking solution (0.2% Blocking Solution). See Tech Note #102 for preparation of an alloy conjugate.
7. Wash 3x5 minutes as above.
8. Dry membrane and record data.
9. (OPTIONAL) Proceed with [silver enhancement](#) to improve sensitivity.

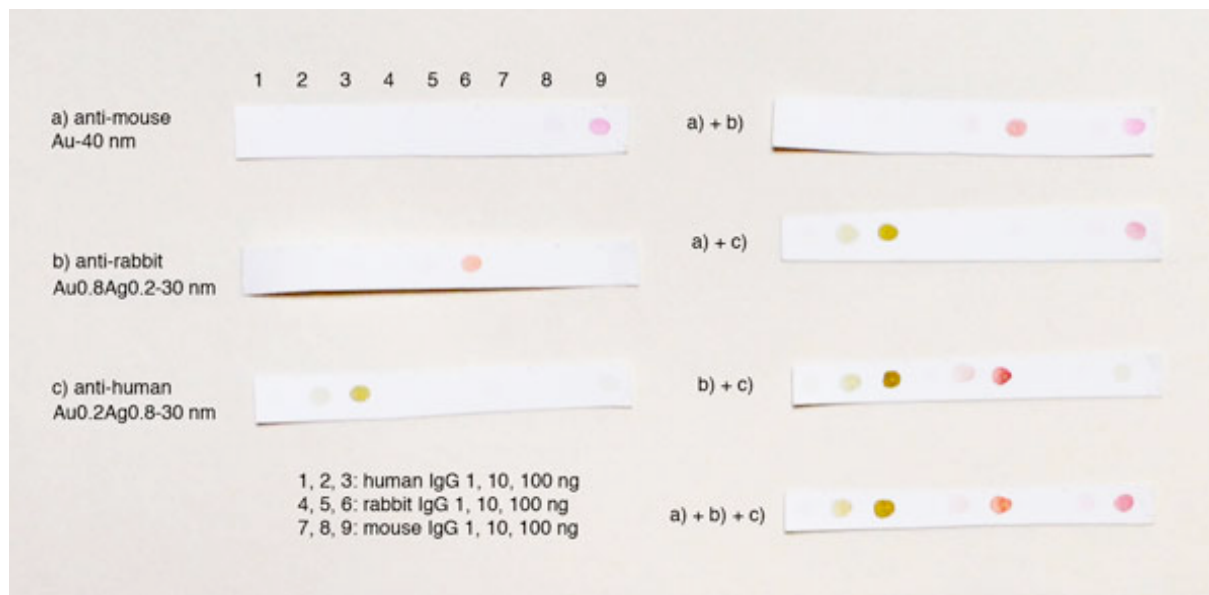


Figure 1. Dot-blot assay using three different types of noble metal nanoparticle conjugates, i.e. anti-mouse IgG 40nm gold conjugate (top left), anti-rabbit IgG Au20/Au80 30nm alloy conjugate (middle left) and anti-human IgG Au80/Au20 30nm alloy conjugate (bottom left). Simultaneous multiplex detection of two or more of the antigens are shown in the right column.

References

1. M. Moeremans, et al., Journal of Immunological Methods, 1984, 74, 353

Ordering Information

For ordering call 866-344-3954 or visit us online at www.cytodiagnos^tics.com