



AURION

Immuno Gold Reagents & Accessories
Custom Labeling

Immunogold Reagents

2nm Immunogold Reagents

Aurion 2nm Immunogold Reagents are prepared using a monodisperse size population of 2nm gold nanoparticles.

Due to its small gold nanoparticle size, labeling density with Aurion 2nm Immunogold Reagents is significantly higher compared to particle density obtained with Conventional Immunogold Reagents.

This makes the conjugate especially suited for detection of low copy numbers of antigen.



...features

- monodisperse size population
- coefficient of variance < 15%
- for pre- and post embedding
- direct visualization in EM optional
 - for electron microscopy
 - with
AURION R-GENT SE-EM
Silver Enhancement Reagents
- for light microscopy and bio assays
 - with
AURION R-GENT SE-LM
Silver Enhancement Reagents

• Introduction

2nm Immunogold Reagents can be used in both post- and pre-embedding applications.

Direct visualization of the particles is possible in TEM on specimens with low electron density or by using e.g. an annular dark field detector in STEM. For ease of visualization silver enhancement may be used. Enhancement with R-Gent SE-EM results in a homogeneous gold/silver particle size population. R-Gent SE-LM is the silver enhancement reagent of choice in light microscopic or immuno blotting experiments.

• Product Description

AURION 2nm Immunogold Reagents contain 60-80 μg of specific protein/ml for IgG conjugates. The average gold particle diameter is 2nm.

The reagents are supplied in PBS with 1% Bovine Serum Albumin and 15 mM NaN_3 .

The activity of each lot is determined using a dot-spot test system as described by Moeremans et al., J. Immunol. Methods, 74, (1984), 353.

The products are available in two package sizes:

Regular package: 1ml suited for 800 grids or 400 slides

Small package: 400 μl for 320 grids or 160 slides.

• Application Instructions

Detailed procedure and instructions for use are described in the package insert.

On-Grid Labeling

For most applications grids are floated on top of drops of dilute reagent placed on a sheet of Parafilm™. The use of gold or nickel grids is recommended.

Whole mount and intact cell labeling:

Specimens are kept floating in dilute reagent on a rocking table.

Recommended Incubation Solution:

PBS,

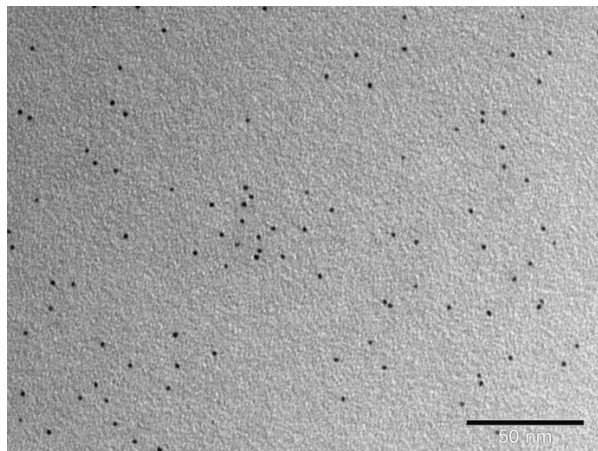
(10 mM Phosphate buffer, 150 mM NaCl),

0.1-0.2 % AURION BSA-C™

15 mM NaN_3

Note on background prevention:

A special AURION NEWSLETTER dealing with the topic of background is available on request.



Typical size distribution AURION of 2nm Immunogold Reagents

• Specificity

AURION 2nm Immunogold Reagents are prepared using the highest quality antibodies or binding agents available. Antibodies are immuno affinity purified and immuno cross-adsorbed to reduce non-specific reactions.

Conjugated to Goat anti Rabbit IgG (H&L) and Goat anti Mouse IgG (H&L).

For other species and specificities we kindly refer you to our Custom Labeling Service.

• Storage

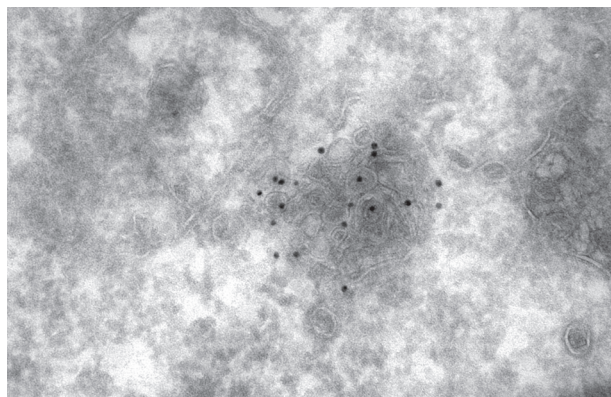
AURION 2nm Immunogold Reagents have a guaranteed shelf life of 18 months from the date of quality control analysis.

The products should be stored at 4-8°C.

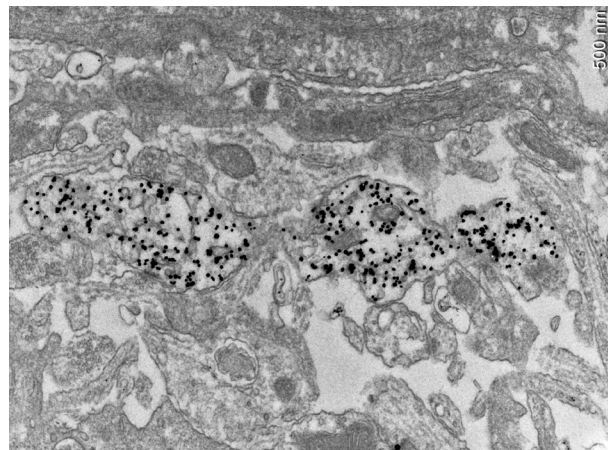
Freezing is not recommended.

• Ordering Information

2nm Immunogold Reagents	(ml)	Product code
Goat-anti-Rabbit IgG (H&L), 2nm	0.4 ml	802.011
Goat-anti-Rabbit IgG (H&L), 2nm	1.0 ml	102.011
Goat-anti-Mouse IgG (H&L), 2nm	0.4 ml	802.022
Goat-anti-Mouse IgG (H&L), 2nm	1.0 ml	102.022



Post embedding immunolabeling: Detection of Lamp2 on Tokuyasu sections of 4% PFA fixed HeLa cells using AURION GAM IgG 2nm and AURION R-Gent SE-EM Courtesy of M. Mari, UMCG & RUG, Molecular Cell Biology, Groningen, The Netherlands



Pre-embedding labeling on 2%PFA/GA fixed and freeze thaw permeabilized organotypic cultured brain slices using rabbit anti GFP, AURION GAR 2nm and R-Gent SE-EM. Courtesy of Y. Sun, D. Guerrero-Given and N. Kamasawa; EM Core Facility, Max Planck Florida, Institute for Neuroscience, Jupiter, FL USA



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