### Nanogold® Conjugates

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>Nanogold® - anti mouse IgG (NMI)</td>
<td>1.4 nm gold particle attached to affinity-purified IgG molecule, raised in goat, against mouse IgG (whole molecule).</td>
</tr>
<tr>
<td>2002</td>
<td>Nanogold® - anti mouse Fab' (NMF)</td>
<td>1.4 nm gold particle attached to affinity-purified Fab' fragment, raised in goat, against mouse IgG (whole molecule).</td>
</tr>
<tr>
<td>2003</td>
<td>Nanogold® - anti rabbit IgG (NRI)</td>
<td>1.4 nm gold particle attached to affinity-purified IgG molecule, raised in goat, against rabbit IgG (whole molecule).</td>
</tr>
<tr>
<td>2004</td>
<td>Nanogold® - anti rabbit Fab' (NRF)</td>
<td>1.4 nm gold particle attached to affinity-purified Fab' fragment, raised in goat, against rabbit IgG (whole molecule).</td>
</tr>
<tr>
<td>2005</td>
<td>Nanogold® - anti goat IgG (NGI)</td>
<td>1.4 nm gold particle attached to affinity-purified IgG molecule, raised in rabbit, against goat IgG (whole molecule).</td>
</tr>
<tr>
<td>2006</td>
<td>Nanogold® - anti goat Fab' (NGF)</td>
<td>1.4 nm gold particle attached to affinity-purified Fab' fragment, raised in rabbit, against goat IgG (whole molecule).</td>
</tr>
<tr>
<td>2007</td>
<td>Nanogold® - anti rat IgG (NRatI)</td>
<td>1.4 nm gold particle attached to affinity-purified IgG molecule, raised in goat, against rat IgG (whole molecule).</td>
</tr>
<tr>
<td>2008</td>
<td>Nanogold® - anti rat Fab' (NRatF)</td>
<td>1.4 nm gold particle attached to affinity-purified Fab' fragment, raised in goat, against rat IgG (whole molecule).</td>
</tr>
<tr>
<td>2015</td>
<td>Nanogold® - anti biotin IgG (NBI)</td>
<td>1.4 nm gold particle attached to anti-biotin IgG molecule, raised in goat.</td>
</tr>
<tr>
<td>2016</td>
<td>Nanogold® - streptavidin (NS)</td>
<td>1.4 nm gold particle attached to streptavidin.</td>
</tr>
<tr>
<td>2050</td>
<td>Nanogold® - anti sheep IgG (NSI)</td>
<td>1.4 nm gold particle attached to affinity-purified IgG molecule, raised in rabbit, against sheep IgG (whole molecule).</td>
</tr>
<tr>
<td>2051</td>
<td>Nanogold® - anti sheep Fab' (NSF)</td>
<td>1.4 nm gold particle attached to affinity-purified Fab' fragment, raised in rabbit, against sheep IgG (whole molecule).</td>
</tr>
<tr>
<td>2052</td>
<td>Nanogold® - anti human IgG (NHI)</td>
<td>1.4 nm gold particle attached to affinity-purified IgG molecule, raised in goat, against human IgG (whole molecule).</td>
</tr>
<tr>
<td>2053</td>
<td>Nanogold® - anti human Fab' (NHF)</td>
<td>1.4 nm gold particle attached to affinity-purified Fab' fragment, raised in goat, against human IgG (whole molecule).</td>
</tr>
<tr>
<td>2054</td>
<td>Nanogold® - anti guinea pig IgG (NGPI)</td>
<td>1.4 nm gold particle attached to affinity-purified IgG molecule, raised in goat, against guinea pig IgG (whole molecule).</td>
</tr>
<tr>
<td>2055</td>
<td>Nanogold® - anti guinea pig Fab' (NGPF)</td>
<td>1.4 nm gold particle attached to affinity-purified Fab' fragment, raised in goat, against guinea pig IgG (whole molecule).</td>
</tr>
<tr>
<td>2056</td>
<td>Custom Labelling with Nanogold®</td>
<td>Your primary antibody (IgG or Fab'), proteins, peptides, lectins, and other molecules.</td>
</tr>
<tr>
<td></td>
<td>Contact us for quote</td>
<td></td>
</tr>
</tbody>
</table>

### Recombinant Protein Detection

#### Histidine-tagged Protein Detection

2080 Ni-NTA-Nanogold® (NNG)
30 nmol $319
Gold particles functionalized with nickel (II) nitraloacetic acid (NTA) chelates. Use for localizing and detecting polyhistidine-tagged targets such as overexpressed proteins in protein complexes, cells or tissues. Smaller than antibody probes.
Nanogold® Reagents

2020 Monomaleimido Nanogold® (MMN)
30 nmol $340
1.4 nm gold particle with single maleimide group for selectively labeling thiols (-SH). May be used to label primary Fab’ antibody fragments, IgG, cysteine residues on proteins, or other sulfhydryl-containing compounds. 30 nmol provided: enough to label 200 µg Fab’.

2020A Monomaleimido Nanogold In 5 aliquots (MMNA)
30 nmol $392
Same total as 2020, but provided in 5 separate tubes. Since the maleimide moiety is unstable once dissolved separate aliquots are preferable if several smaller quantity labeling reactions are planned at different times.

2020S Monomaleimido Nanogold® (MMNS)
6 nmol $98
Same as 2020, but packaged in an introductory size for smaller labeling experiments.

2021 Monoamino Nanogold® (MN)
30 nmol $235
1.4 nm gold particle with a single primary amine may be used for labeling the carbohydrate moiety of glycoproteins or other applications.

2021A Monoamino Nanogold® In 5 aliquots (MNA)
30 nmol $270
Same total quantity as 2021, but provided in 5 separate tubes.

2021S Monoamino Nanogold® (MNS)
6 nmol $68
Same as 2021, but packaged in an introductory size for smaller labeling experiments.

2022 Positively Charged Nanogold® (PN)
30 nmol $235
1.4 nm gold particles with a net positive charge; contains multiple amines. Use these particles for alternative coupling schemes, or to bind to negatively charged sites.

2023 Negatively Charged Nanogold® (NN)
30 nmol $235
1.4 nm gold particles with a net negative charge; contains multiple carboxyl groups. Use these particles for alternative coupling schemes, or to bind to positively charged sites.

2025 Mono-Sulfo-NHS-Nanogold® (NHSN)
30 nmol $340
1.4 nm gold particle with a single N-hydroxy-sulfosuccinimide group. Used for labeling primary amines.

2025A Mono-Sulfo-NHS-Nanogold® in 5 aliquots (NHSNA)
30 nmol $392
Same total quantity as 2025, but provided in 5 separate tubes. Since the NHS-ester hydrolyzes once dissolved, separate aliquots are preferable if several smaller quantity labeling reactions are planned at different times.

2025S Mono-Sulfo-NHS-Nanogold® (NHSNS)
6 nmol $98
Same as 2025, but packaged in an introductory size for smaller labeling experiments.

2010 Nanogold® Particles, non-functionalized (NG)
30 nmoles $ 157
1.4 nm gold particles only, lyophilized; non-reactive form.

Custom Labelling with Nanogold®
Your antibody (IgG or Fab’), proteins, and other molecules.
Contact us for quote

FluoroNanogold™

Fluorescein FluoroNanogold™
0.5 ml $232 or 1.0 ml $371

7002: FluoroNanogold™-anti-mouse Fab’-Fluorescein
1.4 nm gold particle attached to affinity-purified Fab’ fragment, raised in goat, against mouse IgG (whole molecule).
Fluorophore: Fluorescein.

7004: FluoroNanogold™-anti-rabbit Fab’-Fluorescein
1.4 nm gold particle attached to affinity-purified Fab’ fragment, raised in goat, against rabbit IgG (whole molecule).
Fluorophore: Fluorescein.

Alexa Fluor® 488 - FluoroNanogold™
0.5 ml $232 or 1.0 ml $371

7202: FluoroNanogold™ anti mouse Fab’ Alexa Fluor® 488
1.4 nm gold particle attached to affinity purified Fab’ fragment, raised in goat, against mouse IgG (whole molecule).
Fluorophore: Alexa Fluor® 488.

7204: FluoroNanogold™ anti rabbit Fab’ Alexa Fluor® 488
1.4 nm gold particle attached to affinity purified Fab’ fragment, raised in goat, against rabbit IgG (whole molecule).
Fluorophore: Alexa Fluor® 488.

7055: FluoroNanogold™-anti-guinea pig Fab’-Fluorescein
1.4 nm gold particle attached to affinity-purified Fab’ fragment raised in goat, against guinea pig IgG (whole molecule).
Fluorophore: Fluorescein.

7016: FluoroNanogold™-streptavidin Fluorescein
1.4 nm gold particle attached to streptavidin.
Fluorophore: Fluorescein.

Custom labeling available. Contact us for quote.
Alexa Fluor® 488 - FluoroNanogold™ (continued)

0.5 ml $232 or 1.0 ml $371

7206: FluoroNanogold™-anti-goat Fab'-Alexa Fluor® 488
1.4 nm gold particle attached to affinity-purified Fab' fragment. Raised in rabbit, against goat IgG (whole molecule).
Fluorophore: Alexa Fluor® 488.

7208: FluoroNanogold™-anti-rat Fab'-Alexa Fluor® 488
1.4 nm gold particle attached to affinity-purified Fab' fragment. Raised in goat, against rabbit IgG (whole molecule).
Fluorophore: Alexa Fluor® 488.

7215: FluoroNanogold™-anti-sheep Fab'-Alexa Fluor® 488
1.4 nm gold particle attached to affinity-purified Fab' fragment. Raised in rabbit, against sheep IgG (whole molecule).
Fluorophore: Alexa Fluor® 488.

7253: FluoroNanogold™-anti-human Fab'-Alexa Fluor® 488
1.4 nm gold particle attached to affinity-purified Fab' fragment. Raised in goat, against human IgG (whole molecule).
Fluorophore: Alexa Fluor® 488.

7255: FluoroNanogold™-anti-guinea pig Fab'-Alexa Fluor® 488
1.4 nm gold particle attached to affinity-purified Fab' fragment. Raised in goat, against guinea pig IgG (whole molecule).
Fluorophore: Alexa Fluor® 488.

7216: FluoroNanogold™-streptavidin Alexa Fluor® 488
1.4 nm gold particle attached to streptavidin.
Fluorophore: Alexa Fluor® 488.

Custom labeling available. Call for quote.

Alexa Fluor® 594 - FluoroNanogold™

0.5 ml $232 or 1.0 ml $371

7302: FluoroNanogold™-anti-mouse Fab'-Alexa Fluor® 594
1.4 nm gold particle attached to affinity-purified Fab' fragment. Raised in goat, against mouse IgG (whole molecule).
Fluorophore: Alexa Fluor® 594.

7304: FluoroNanogold™-anti-rabbit Fab'-Alexa Fluor® 594
1.4 nm gold particle attached to affinity-purified Fab' fragment. Raised in goat, against rabbit IgG (whole molecule).
Fluorophore: Alexa Fluor® 594.

7355: FluoroNanogold™-anti-goat Fab'-Alexa Fluor® 594
1.4 nm gold particle attached to affinity-purified Fab' fragment. Raised in goat, against guinea pig IgG (whole molecule).
Fluorophore: Alexa Fluor® 594.

7316: FluoroNanogold™-streptavidin Alexa Fluor® 594
1.4 nm gold particle attached to streptavidin.
Fluorophore: Alexa Fluor® 594.

Custom labeling available. Contact us for quote.

Undecagold Reagents

2030 Monomaleimido Undecagold (MMU)
50 nmol $340
Au₁₁ cluster with single maleimide group for selectively labeling thiols (-SH). May be used to label primary Fab' antibody fragments, cysteine groups on proteins, or other sulfhydryl containing compounds. Reagent and procedure to label 300 µg Fab'.

2030A Monomaleimido Undecagold In 5 aliquots (MMUA) 50 nmol $392
Same total quantity as 2030, but provided in 5 separate tubes. Since the maleimide moiety is unstable once dissolved, separate aliquots are preferable is several smaller quantity labeling reactions are planned at different times.

2030S Monomaleimido Undecagold (MMUS)
10 nmol $98
Same as 2030, but packaged in an introductory size for smaller labeling experiments.

2031 Monoamino Undecagold (MU)
50 nmol $235
Au₁₁ cluster with a single primary amine. May be used for labeling the carbohydrate moiety of glycoproteins or other uses.

2031A Monoamino Undecagold In 5 aliquots (MUA) 50 nmol $270
Same total quantity as 2031, but provided in 5 separate tubes.
## Undecagold Reagents (continued)

<table>
<thead>
<tr>
<th>Code</th>
<th>Name</th>
<th>Quantity</th>
<th>Price</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2031S</td>
<td>Monoamino Undecagold (MUS)</td>
<td>10 nmol</td>
<td>$68</td>
<td>Same as 2031, but packaged in an introductory size for smaller labeling experiments.</td>
</tr>
<tr>
<td>2043</td>
<td>Positively Charged Undecagold (PU)</td>
<td>50 nmol</td>
<td>$235</td>
<td>Undecagold with a net positive charge, contains amino groups.</td>
</tr>
<tr>
<td>2044</td>
<td>Negatively Charged Undecagold (NU)</td>
<td>50 nmol</td>
<td>$235</td>
<td>Undecagold with a net negative charge, contains carboxyl groups.</td>
</tr>
<tr>
<td>2045</td>
<td>Mono-NHS-U ndecagold (NHSU)</td>
<td>50 nmol</td>
<td>$340</td>
<td>Undecagold with a single N-hydroxy-sulfosuccinimidyl group. Used for labeling primary amines.</td>
</tr>
<tr>
<td>2045A</td>
<td>Mono-NHS-Undecagold In 5 aliquots (NHSUA)</td>
<td>50 nmol</td>
<td>$392</td>
<td>Same total quantity as 2045 but provided in 5 separate tubes.</td>
</tr>
<tr>
<td>2045S</td>
<td>Mono-NHS-Undecagold (NHSUS)</td>
<td>10 nmol</td>
<td>$98</td>
<td>Same as 2045, but packaged in an introductory size for smaller labeling experiments.</td>
</tr>
<tr>
<td>2060</td>
<td>Undecagold Particles, non-functionalized (UG)</td>
<td>50 nmoles</td>
<td>$157</td>
<td>Undecagold particles only, lyophilized, non-reactive form.</td>
</tr>
</tbody>
</table>

### Custom labeling available. Contact us for quote.

## Gold Lipids

<table>
<thead>
<tr>
<th>Code</th>
<th>Name</th>
<th>Quantity</th>
<th>Price</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4020</td>
<td>Palmitoyl Nanogold®</td>
<td>30 nmol</td>
<td>$283</td>
<td>The C₁₅ palmitic acid (a fatty acid) covalently attached to the 1.4 nm Nanogold® particle.</td>
</tr>
<tr>
<td>4021</td>
<td>DPPE Nanogold®</td>
<td>30 nmol</td>
<td>$298</td>
<td>Dipalmitoyl phosphatidylethanolamine covalently attached to the 1.4 nm Nanogold® particle.</td>
</tr>
<tr>
<td>4022</td>
<td>Palmitoyl Undecagold</td>
<td>30 nmol</td>
<td>$262</td>
<td>The C₁₅ palmitic acid (a fatty acid) covalently attached to the 0.8 nm undecagold particle.</td>
</tr>
<tr>
<td>4023</td>
<td>DPPE Undecagold</td>
<td>30 nmol</td>
<td>$275</td>
<td>Dipalmitoyl phosphatidylethanolamine covalently attached to the 0.8 nm undecagold particle.</td>
</tr>
</tbody>
</table>

## Silver Enhancers

<table>
<thead>
<tr>
<th>Code</th>
<th>Name</th>
<th>Quantity</th>
<th>Price</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>HQ Silver (HOS)</td>
<td>15 ml</td>
<td>$104</td>
<td>Highest quality enhancer for Nanogold® giving uniform development and excellent structural preservation. especially for EM; light sensitive.</td>
</tr>
<tr>
<td>2013</td>
<td>LI Silver (LIS)</td>
<td>250 ml</td>
<td>$141</td>
<td>A convenient silver enhancer for Nanogold® for EM, LM, gels and blots; light insensitive.</td>
</tr>
</tbody>
</table>

## GoldEnhance

<table>
<thead>
<tr>
<th>Code</th>
<th>Name</th>
<th>Quantity</th>
<th>Price</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2112</td>
<td>GoldEnhance LM/Blot (GELM)</td>
<td>4 mL</td>
<td>$159</td>
<td>Gold developer formulated for use with light microscopy samples. Comes in four solutions, to be mixed just before use. 12 mL total, enough for 200 slides (60 microliters/slide).</td>
</tr>
<tr>
<td>2113</td>
<td>GoldEnhance EM (GEEM)</td>
<td>2 mL</td>
<td>$85</td>
<td>Gold developer formulated for use with electron microscopy samples. Comes in four solutions, to be mixed just before use. 5 mL total, enough for 200 grids (25 microliters/grid).</td>
</tr>
</tbody>
</table>

## Negative Stains

<table>
<thead>
<tr>
<th>Code</th>
<th>Name</th>
<th>Quantity</th>
<th>Price</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>NanoVan® (NV)</td>
<td>5 ml</td>
<td>$84</td>
<td>A 2% Vanadium negative stain recommended for use with Nanogold® or other applications where a low atomic number light stain is needed.</td>
</tr>
<tr>
<td>2018</td>
<td>Nano-W® (NW)</td>
<td>5 ml</td>
<td>$84</td>
<td>A 2% negative stain based on an organotungsten compound.</td>
</tr>
</tbody>
</table>