

# Product Datasheet

## InnovaCoat (R) GOLD - Carboxyl 400D 40nm 3400-0001

Unit Size: 40 ug

Store at 4C. Do not freeze.

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**3400-0001**

InnovaCoat (R) GOLD - Carboxyl 40OD 40nm

**Product Information**

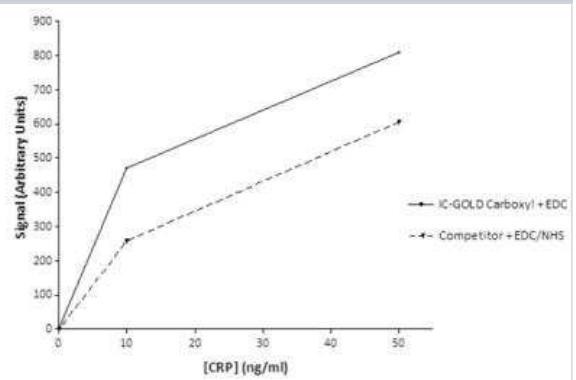
<b>Unit Size</b>	40 ug
<b>Concentration</b>	Please see the protocols for proper use of this product. If no protocol is available, contact technical services for assistance.
<b>Storage</b>	Store at 4C. Do not freeze.

**Product Description**

<b>Description</b>	<p><b>Composition:</b> 40 carboxyl gold 40 OD  <b>Size:</b> 40nm  <b>Adsorption max:</b> 530nm  <b>OD:</b> 40.0  <b>Particle per ml:</b> 36 x 1011  <b>Volume:</b> 1 ml and 5 ml  <b>Buffer:</b> 10 mM EPPS, pH 8.5</p> <p>InnovaCoat GOLD-Carboxyl nanoparticles are coated gold nanoparticles functionalized with carboxyl groups that allow the covalent conjugation of antibodies, using the water soluble carbodiimide crosslinker EDC. The product enables the generation of highly stable covalent gold-antibody conjugates at R&amp;D and manufacturing scales. Unlike traditional EDC/NHS coupling used to activate carboxyl groups, InnovaCoat GOLD-Carboxyl nanoparticles are optimized for single step EDC covalent coupling without signs of aggregation. This eliminates the need for EDC/NHS pre-activation and washing steps associated with traditional conjugations. This process is also significantly faster than standard methods, with conjugates ready to use in less than 35 minutes. InnovaCoat GOLD carboxyl nanoparticles have a narrow size distribution, a uniform spherical shape and high batch-to-batch consistency.</p> <p><b>Mean DiameterSDCV%</b> 36 - 44nm &lt; 4nm &lt; 10%</p>
<b>Notes</b>	<p>This product is manufactured by Abcam and distributed by Novus Biologicals.</p> <p>This product is for research use only and is not approved for use in humans or in clinical diagnosis. This product is guaranteed for 1 year from date of receipt and this statement overrides any mentioned guarantee period on the limitations section of this products datasheet. Please contact <a href="mailto:technical@novusbio.com">technical@novusbio.com</a> with questions.</p>

## Images

Flow Cytometry: InnovaCoat GOLD - Carboxyl 40OD 40nm Antibody Labeling Kit [3400-0001] - Lateral Flow Assay of our 40nm InnovaCoat GOLD-Carboxyl gold nanoparticles conjugated with EDC (1 step) to a monoclonal anti-CRP antibody (mAb1) titrated against CRP in buffer compared to a 2 steps EDC/NHS reaction using a competitor's 40nm carboxyl-gold. The 40nm InnovaCoat GOLD-Carboxyl conjugate shows a better sensitivity than the competitor, no aggregation is seen and requires only 35 minutes to make. Following the competitor's instruction, their product required from 3 to 5 hours for the EDC/NHS activation and conjugation reaction and significant optimization to prevent aggregation.





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## Limitations

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Support products are guaranteed for 6 months from date of receipt.

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