

### Gold Conjugation Kit (80nm, 20 OD) ab154876

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#### 概述

##### 产品名称

Gold偶联试剂盒(80nm, 20 OD)

##### 产品概述

Abcam's Gold Conjugation Kit allows antibodies or proteins to be covalently attached to ultra-stable Gold nanoparticles at very high OD quickly and easily. The nanoparticles in the Abcam's Gold Conjugation Kit have a protective surface coat that can withstand the most extreme conditions (e.g. 2.5M NaOH at 70°C for > 1 hour). The hands-on time for the Abcam Gold conjugation procedure is around 2 minutes and the conjugate is ready to use within 20 minutes. The researcher simply pipettes the biomolecule into a vial containing the nanoparticles of the Gold Conjugation Kit.

The nanoparticles in this kit are supplied as a freeze-dried mixture. The conjugation reaction is initiated simply by reconstituting the freeze-dried nanoparticles with the antibody, which becomes attached (through lysine residues) to the surface of the nanoparticles.

The resulting covalent conjugates are more stable than those prepared by passive adsorption methods. Moreover, unlike passive methods, the coating process is independent of the isoelectric point of the antibody, avoiding the need for extensive trials at different pH values. All antibodies can be labelled at a single pH.

Learn more about buffer compatibility, protein/secondary antibody conjugation and labeling chemistry in our FAQs.

#### Benefits:

Easy and rapid conjugation – only 2 minutes hands-on time and 100% recovery of materials

Site-specific labelling – Antigen binding sites of antibodies are free to bind the target molecule

Proprietary surface coating prevents metal-protein interactions, and enables covalent attachment to the Gold – Stable conjugates formed

Fully scalable – Easy transfer from R&D to manufacturing

Uniform spherical shape and narrow size distribution – Consistent high quality and excellent

batch-to-batch reproducibility

### Buffer requirements:

The biomolecule to be conjugated should ideally be in 10 mM amine-free buffer (e.g. MES, MOPS, HEPES), pH range 6.5 to 8.5. Sugars have no effect on conjugation efficiency. For incompatible buffers and low antibody concentrations, use our rapid **antibody purification and concentration kits** for Nanoparticles. To learn more about incompatible buffers, please refer to the protocol booklet.

### 说明

This product is manufactured by Expedeon, an Abcam company, and was previously called 80nm InnovaCoat<sup>®</sup> GOLD. 231-0010 is the same as the 10 x 0.5 µg size. 231-0015 is the same as the 1 x 5 µg size. 231-0005 is the same as the 3 x 0.5 µg size.

The 3 x 0.5 µg and 10 x 0.5 µg conjugation kits are designed to label 12 µl per vial.

The 1 x 5 µg conjugation kit is designed to label 120 µl per vial.

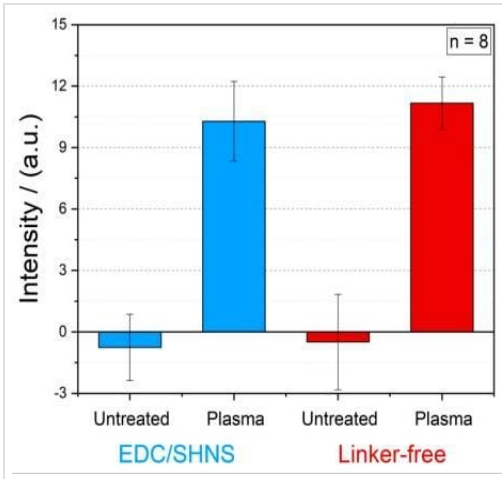
### 性能

#### 存放说明

Store at -20°C. Please refer to protocols.

组件	3 x 0.5 µg	10 x 0.5 µg	1 x 5 µg
ab273951 - Gold 80nm	3 x 500ng	10 x 500ng	1 x 5µg
ab273943 - Gold Antibody Diluent	1 x 1ml	1 x 4ml	1 x 4ml
Gold Quencher Reagent	1 x 700µl	1 x 700µl	1 x 700µl
Gold Reaction Buffer	1 x 750µl	1 x 750µl	1 x 750µl

### 图片

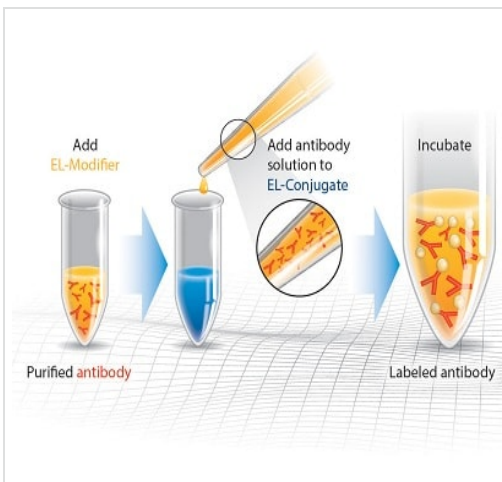


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(ab154876)

Image from Wieland et al., Polymers (Basel), 12(1):104; doi: 10.3390/polym12010104. Reproduced under the Creative Commons license <https://creativecommons.org/licenses/by/4.0/>

Wieland, Felicia, et al used Gold Conjugation Kit (80nm, 20 OD) (ab154876) as part of examining polymeric materials. They used the kit to conjugate Gold to mouse IgG antibodies for use in plasma treatment of surfaces.

Comparison of two different immobilization techniques on the antibody immobilization: (i) EDC/SHNS based and (ii) linker-free immobilization of gold nanoparticle labelled antibodies on the untreated and plasma treated PMMA foils (100% O<sub>2</sub>, 5 min, 1000 W, 80 °C).



Conjugation - GOLD Conjugation Kit (80nm, 20 OD)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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