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Datasheet for A003-07

# Avidin Glucose Oxidase Conjugated

## Overview

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| **Description:** | Avidin Glucose Oxidase Conjugated - A003-07 |
| **Item No.:** | A003-07 |
| **Size:** | 2 mg |
| **Applications:** | ELISA, Biochemical Assay, Other |

## Product Details

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| **Background:** | Avidin is a biotin-binding protein found in the oviducts of egg-laying animals (birds, reptiles, and frogs) that gets deposited into the whites of their eggs. Avidin is a tetramer and can bind up to four biotin molecules (Vitamin B7) with one of the greatest known non-covalent interactions. Avidity for biotin is destroyed with heat. Glucose oxidase is an enzyme that drives the oxidation of glucose into hydrogen peroxide and D-glucono-δ-lactone. This activity is utilized in biotechnology through colormetric detection assays that are sensitive to the amount of hydrogen peroxide produced. Avidin Glucose Oxidase Conjugated is ideal for investigators in Immunology, Cancer, Neuroscience, and Cell Biology. |
| **Synonyms:** | AvD, Avidin Biotin Complex, GOD, GOx, Avidin Glucose Oxidase Conjugated |
| **Conjugate:** | Glucose Oxidase (Aspergillus niger) |

## Target Details

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| **Purity/Specificity:** | Avidin Glucose Oxidase was prepared from chromatographically pure avidin isolated from egg white followed by extensive dialysis against the buffer stated above. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-Avidin and anti-Glucose Oxidase. |
| **Relevant Links:** | • A003-07 SDS<br>• UniProtKB - P02701 |

## Application Details

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| **Tested Applications:** | ELISA |

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| **Suggested Applications:** | Biochemical Assay, Other (Based on references) |
| **Application Note:** | Avidin Glucose Oxidase Conjugated is a useful detection reagent for primary antibodies conjugated to biotin. Avidin Glucose Oxidase Conjugated has been tested by ELISA and can be utilized in both Western Blotting and ELISA experiment formats in combination with the proper substrate (TMB-1000 or FEMTOMAX-110). |
| **Assay Dilutions:** | All assays should be optimized by the user. Recommended dilutions (if any) may be listed below. |
| **ELISA:** | 1:8,000 - 1:32,000 |
| **IHC:** | 1:200 - 1:1,000 |
| **WB:** | 1:500 - 1:2,500 |

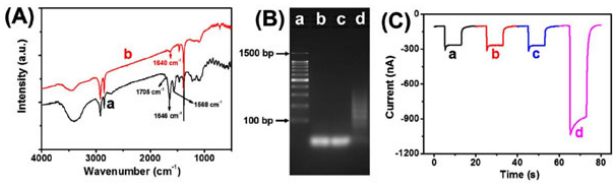
## Formulation

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| **Physical State:** | Lyophilized |
| **Concentration:** | 2 mg/mL by dry weight |
| **Buffer:** | 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 |
| **Preservative:** | 0.01% (w/v) Sodium Azide |
| **Stabilizer:** | 10 mg/mL Bovine Serum Albumin (BSA) - Immunoglobulin and Protease free |
| **Reconstitution Volume:** | 1.0 mL |
| **Reconstitution Buffer:** | Restore with deionized water (or equivalent) |

## Shipping & Handling

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| **Shipping Condition:** | Ambient |
| **Storage Condition:** | Store vial at 4° C prior to restoration. For extended storage aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use. |
| **Expiration:** | Expiration date is one (1) year from date of receipt. |

## Images




**Western Blot**
(A) FT-IR spectra of (a) MB-aDNA and (b) carboxylated MBs; (B) Gel electrophoresis (lane a: DNA marker, lane b: H1, lane c: H1 + H2, lane d: H1 + H2 + tDNA); (C) Photocurrents of (b) MB-aDNA + Apt/tDNA + H1/H2-GOx, (c) MB-aDNA + Apt/tDNA + H1/H2-GOx + glucose, (d) MB-aDNA + Apt/tDNA + H1/H2-GOx + glucose + PSA on the rGO-BiFeO3-modified FTO in PBS (0.1 M, pH 6.0) (note: Curve 'a' gives the photocurrent of rGO-BiFeO3-modified FTO) (1.0 ng/mL PSA used in this case). Fig 3. PMID: 29065339.



**Bottle**
Avidin Glucose Oxidase Conjugated

## References


- Zhou Q et al. Reduced graphene oxide/BiFeO 3 nanohybrids-based signal-on photoelectrochemical sensing system for prostate-specific antigen detection coupling with magnetic microfluidic device. *Biosens Bioelectron.* (2018)
- Timalsina YP, et al. Alternating current impedance spectroscopic analysis of biofunctionalized vertically-aligned silica nanospring surface for biosensor applications. *J. Appl. Phys.* (2011)


## Disclaimer

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