

Xanthine Oxidase Assay Kit

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CATALOG #
AAA332452

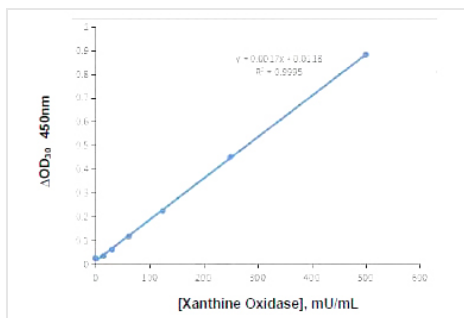
PRODUCT SYNONYMS

Xanthine Oxidase; Xanthine Oxidase Assay Kit; XO; Xanthine Oxidase assay kit

PRODUCT SPECIFICATIONS

Sequence Length	513
Preparation and Storage	Store at -20 degree C and keep from light immediately upon receipt. Kit has a storage time of 6 months from receipt. Refer to list of materials supplied for storage conditions of individual components.

IMAGES



Standard Curve (Sample)

ADDITIONAL INFORMATION

Related Product Information for Xanthine Oxidase assay kit

Principle of the Assay: The Xanthine Oxidase Assay Kit provides a simple and easy colorimetric assay for the quantitative determination of the XO present in a variety of samples. In the assay, XO oxidizes xanthine to superoxide (O₂⁻). Superoxide (O₂⁻) reacts with a tetrazolium salt WST-8 dye to form a water-soluble colored formazan product, which can be easily quantified colorimetrically at OD 450 nm. Therefore, the Xanthine Oxidase present in the sample is proportional to the signal obtained.

Background/Introduction: Xanthine oxidase (EC 1.17.3.2), or xanthine oxidoreductase is recognized as the terminal enzyme of purine catabolism in humans, catalyzing the hydroxylation of hypoxanthine to xanthine and then to uric acid. When acting as an NADH oxidase, XO is a generator of superoxide (O₂⁻), a powerful reactive oxygen species (ROS). XO has also been noted to produce hydrogen peroxide (H₂O₂) and superoxide (O₂⁻) during ischemia-reperfusion injury. Due to their highly reactive nature, these ROS affect various molecular components of the cell, with excess amounts leading to cell degeneration and death. XO is present in appreciable amounts in the liver and jejunum in healthy individuals. However, in various liver disorders, levels of circulating XO have been seen to increase dramatically. Therefore, determination of serum XO level serves as a sensitive indicator of acute liver damage such as jaundice.

Product Categories/Family for Xanthine Oxidase assay kit

Cell Metabolism

NCBI AND UNIPROT INFORMATION

NCBI GI #	157092381
NCBI Official Full Name	xanthine oxidase

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/assay-kits/xanthine-oxidase/332452>