

# Glucose Oxidase (101): sc-66043

## BACKGROUND

Glucose Oxidase is a dimeric enzyme that binds to  $\beta$ -D-glucose and aids in its oxidation into D-glucono-1, 5-lactone which then hydrolyzes to gluconic acid. Flavin adenine dinucleotide (FAD) is a cofactor to Glucose Oxidase that acts as the initial electron acceptor and is required for this oxidation to occur. Glucose Oxidase is a natural preservative found in honey, where it reduces atmospheric oxygen into hydrogen peroxide which acts as an antibacterial barrier. Glucose Oxidase is also commonly used in biosensors in which it conveys levels of glucose by keeping track of the number of electrons passed through the enzyme. In this application, Glucose Oxidase is connected to an electrode and the resulting charge is measured.

## REFERENCES

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## SOURCE

Glucose Oxidase (101) is a mouse monoclonal antibody raised against Glucose Oxidase of *Aspergillus niger* origin.

## PRODUCT

Each vial contains 100  $\mu$ g IgM in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

Glucose Oxidase (101) is recommended for detection of Glucose Oxidases of *Aspergillus niger* origin by solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Molecular Weight of Glucose Oxidase: 75 kDa.

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.