BBI Solutions

GLUCOSE OXIDASE (GO)

EC Number	1.1.3.4		
Alternative Names	Glucose oxyhydrase		
Assay Principle	ß-D-glucose + O_2 + H_2O	Glucose oxidase →	D-glucono- 1,5-lactone + H_2O_2
	H_2O_2 + reduced dye	Peroxidase →	2 H_2O +oxidased dye
Unit Definition	That amount of enzyme causing the oxidation of one micromole of glucose per minute at 25°C and pH 7.0.		

How can Glucose Oxidase be used?

Glucose Oxidase (GO) is used in liquid and powder glucose laboratory reagents, urine test strips, colorimetric blood glucose strips and biosensors for blood glucose monitoring.

What makes BBI a leading manufacturer of Glucose Oxidase?

With over 60 years' experience supplying critical raw materials to the diagnostics industry, BBI Solutions (BBI) is renowned as one of the world's leading providers of high quality enzymes for biosensor applications.

BBI's Glucose Oxidase is tried, tested and proven to perform in over 5 billion test strips every year.

The high activity and stability of our GO means you use less enzyme per strip – reducing costs, while increasing the speed, accuracy and longevity of the strip, and it's a proven raw material, which **reduces validation time**.

Our manufacturing procedures, which have been developed and optimised over many years, ensure **a product of the highest quality, stability, and batch-to-batch consistency**, providing sensor and reagent manufacturers with a range of Glucose Oxidase products with proven performance.

Key Benefits

+ GREATER ACCURACY

Highest levels of activity and purity to increase speed and accuracy

+ CHOICE AND FLEXIBILITY

Multiple grades and custom preparations available for specific applications to optimise your assay at reduced cost

+ PROVEN PERFORMANCE

Enabling strip manufacturers to comply with the latest accuracy guidelines (+/- 15%)

+ BATCH-TO-BATCH REPRODUCIBILITY AND CONSISTENCY

Optimised and controlled manufacturing procedures to ensure reproducibility and consistency – essential in high volume strips

+ HIGH MANUFACTURING CAPACITY

BBI has bulk manufacturing capabilities

Order your evaluation sample today

FEB 2021/V4

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Glucose Oxidase	G02BS	>180 U/mg material	Aspergillus niger	Clinical Chemistry/Urine Test Strips
	G03A	~360 U/mg protein	Aspergillus niger	Biosensor/Clinical Chemistry
	G03B2	~360 U/mg protein	Aspergillus niger	Biosensor/Clinical Chemistry/Urine Test Strips
	G03B3	~360 U/mg protein	Aspergillus niger	Biosensor/Clinical Chemistry

FAQ's

HOW IS GLUCOSE OXIDASE PRODUCED?

From large-scale fermentation of the fungus *Aspergillus niger*. The crude fermentation liquor is purified using multiple precipitation, fractionation, chromatography and filtration steps.

WHICH GRADE IS BEST TO USE FOR INCREASED PERFORMANCE IN BIOSENSORS?

BBI product code GO3A.

HOW SHOULD THE MATERIAL BE STORED?

Store desiccated at -15°C or below.

Product Analysis

AN EXAMPLE OF TYPICAL BATCH DATA

Code	GO3A
Batch	758Z
Activity	285 U/mg material 374.5 U/mg protein
Associated activity	***Contaminants***
α – Amylase	: <0.0001%
Catalase	: <0.0102 U/mg material
Maltase	: 0.00178%
Saccharase	: 0.00011%
GO/CAT ratio	: 27900
Stability	Stable for 3 years when stored in accordance with storage conditions excluding: GO2B2 - Stable for 2 years

Related Products

Application Area	Product Name	Code	Activity
Biosensors	FAD dependent Glucose Dehydrogenase	GLD1	> 625 U/mg material
Biosensors	FAD dependent Glucose Dehydrogenase	GLD3	> 300 U/mg material
Biosensors	Cholesterol Esterase	CE2	> 35 U/mg material
Biosensors	Cholesterol Oxidase	CO5F	> 12 U/mg material
Biosensors	Creatinase	CR1F	> 9 U/mg material
Biosensors	Creatininase	CNN1	> 500 U/mg material
Biosensors	Sarcosine Oxidase	SO2F	> 20 U/mg material
Biosensors	Urease	URE3	> 1300 Nessler U/mg protein
Biosensors	Uricase	U5	> 4 U/mg material
Clinical Chemistry	Peroxidase	HRP4C	> 250 U/mg material
Clinical Chemistry	Peroxidase	161457BBI	> 200 U/mg material

Order a sample today sales@bbisolutions.com
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FEB2021V4