

# GLUCOSE DEHYDROGENASE

## FAD-GDH with reduced xylose interference

BBI Solutions offers a next generation FAD-dependent Glucose Dehydrogenase (FAD-GDH). FAD-GDH with reduced xylose interference is part of our market leading range of enzymes for blood glucose monitoring, it reduces crossreactivity with a range of sugars, provides increased specificity to glucose and improves reactivity and stability.



The table below shows the specificity for both grades:

	GLD1	GLD3
D (+)-Glucose:	100%	100%
D (+)-Galactose:	0.41%	0.27%
D (+)-Maltose:	0.30%	0.67%
D (+)-Mannose:	4.50%	1.73%
<b>D (+)-Xylose:</b>	<b>12.40%</b>	<b>1.60%</b>
2-deoxy-D-glucose:	43.20%	39.8%

Specificity was measured by substituting different sugars (concentration 200mM) for glucose in the BBI FAD-GDH assay.

## Key Benefits

### + INCREASED ACCURACY

Reduced cross-reactivity with Mannose, Galactose, and Xylose, providing increased specificity to glucose

### + HIGHER REACTIVITY

Providing a faster signal to the end user

### + IMPROVED STABILITY

Improved pH and temperature stability enhances reliable strip performance

### + COST EFFECTIVENESS

Increased reactivity allows the use of fewer units per strip

### + SUPPLY SECURITY

Bulk supply available, offering control over manufacturing processes and supply chain

## Which grade's right for me?

Our two grades of FAD-GDH (GLD1 and GLD3), offer proven performance in a range of systems, the decision on which one's right for you will depend on your individual platform.

Order your evaluation sample today

<b>Product:</b>	Glucose Dehydrogenase (FAD-dependent)
<b>Product code:</b>	GLD3
<b>E.C. number:</b>	1.1.99.10
<b>CAS number:</b>	9035-82-9
<b>EINECS number:</b>	232-907-4
<b>Systematic name:</b>	D-Glucose: (flavin adenine dinucleotide) dehydrogenase
<b>Alternative name:</b>	Glucose dehydrogenase (FAD-) (III)
<b>Source:</b>	Microorganism
<b>Form:</b>	Yellow freeze dried material
<b>Storage conditions:</b>	Store desiccated at -15°C or below. Allow to come to room temperature before opening. Before returning to storage, re-desiccate under vacuum over silica gel for a minimum of four hours
<b>Unit definition:</b>	That amount of enzyme causing the reduction of one micromole of 2,6-Dichlorophenolindophenol per minute at 37°C and pH 6.5
<b>Activity:</b>	Not less than 300 U/mg material
<b>Solubility:</b>	Dissolves readily at 5mg/ml in 0.05M potassium phosphate buffer, pH 5.6 to give a clear solution

### Related Products

Application Area	Product Name	Code	Activity
Biosensors	FAD dependent Glucose Dehydrogenase	GLD1	> 625 U/mg material
Biosensors	Glucose Oxidase	G03A	~360 U/mg protein
Biosensors	Glucose Oxidase	G03B2	~360 U/mg protein
Biosensors	Glucose Oxidase	G03B3	~360 U/mg protein

Order a sample today [sales@bbisolutions.com](mailto:sales@bbisolutions.com)

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