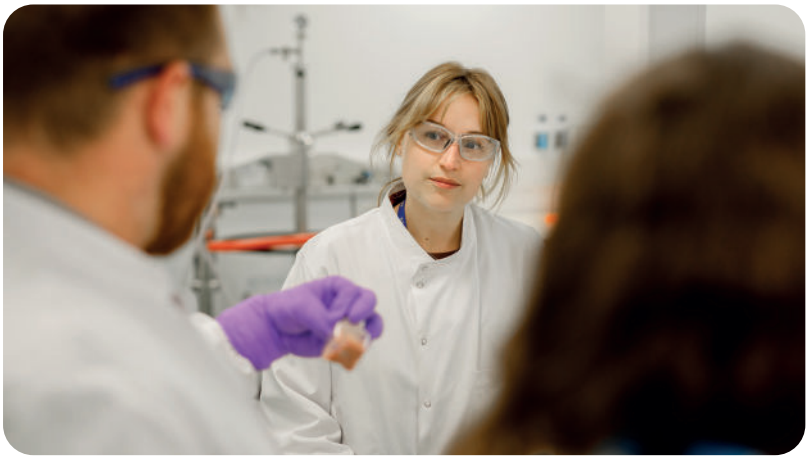
Enzymes

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 our different grades:

	GLD1	GLD3	GLD4
D (+)-Glucose	100%	100%	100%
D (+)-Galactose	0.41%	0.27%	1.98%
D (+)-Maltose	0.30%	0.67%	6.89%
D (+)-Mannose	4.50%	1.73%	1.08%
D (+)-Xylose	12.40%	1.60%	6.07%
2-deoxy-D-glucose	43.20%	39.8%	56.2%

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 is right for me?

Our three grades if FAD-GDH (GLD1, GLD3 and GLD4) offer proven performance in a range of systems. The decision on which one is right for you will depend on your individual application.

Contact our technical team to discuss your needs today:
info@bbisolutions.com

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FAD-GDH with reduced xylose interference

Product description	Glucose dehydrogenase (FAD-dependent)
Product code	GLD4
E.C. number	1.1.5.9
CAS number	9035-82-9
EINECS number	232-907-4
Systematic name	D-Glucose: (flavin adenine dinucleotide) dehydrogenase
Alternative name	Glucose dehydrogenase (FAD-) (III)
Source	Microorganism
Form	Freeze-dried material
Storage conditions	Store desiccated at -15C 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
Unit definition	That amount of enzyme causing the reduction of one micromole of 2,6-Dichlorophenol-indophenol per minute at 37°C and pH 6.5
Activity	Not less than 300 U/mg material
Solubility	Dissolves readily at 5mg/ml in 0.05M potassium phosphate buffer, pH 6.5 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	GO3A	~360 U/mg protein
Biosensors	Glucose Oxidase	GO3B2	~360 U/mg protein
Biosensors	Glucose Oxidase	GO3B3	~360 U/mg protein

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