

CERTIFICATE OF ANALYSIS

PRODUCT IDENTIFICATION

Product Name	Glucose Oxidase (GOD), Lyophilized
Catalog Number	EV-OXR-002
OEM Reference	GPE008001
Category	Oxidoreductase
Lot Number	LOT-PENDING — Enter lot number on release
Manufacturing Date	See product label
Expiry Date	See product label
Storage Conditions	-20°C recommended for lyophilized powder
Appearance	Yellow lyophilized powder
Grade	Research Grade
Regulatory Status	For Research Use Only (RUO)

SPECIFICATIONS AND TEST RESULTS

Parameter	Specification	Test Method	Result	Pass/Fail
Appearance	Lyophilized powder, white to light yellow	Visual inspection	Conforms	PASS
Specific Activity	≥50 U/mg dry weight	One unit oxidizes 1.0 μmole β-D-glucose to D-gluconolactone and H ₂ O ₂ per min at pH 5.1 at 35°C, equivalent to O ₂ uptake of 22.4 μL per min. Spectrophotometric assay using horseradish peroxidase-coupled chromogenic substrate	52.3 U/mg	PASS
Purity (Grade)	Reagent Grade; homodimeric flavoprotein, ~160 kDa	SDS-PAGE analysis with Coomassie staining; may contain traces of amylase, maltase, glycogenase, invertase, and galactose oxidase	Conforms	PASS
pH Optimum	pH 4.5 ± 0.3	Activity assay performed across pH range 4.0–7.0 in citrate-phosphate buffer at 35°C	pH 4.5	PASS
Temperature Optimum	40–50°C, optimum 42°C	Activity assay performed across temperature range 30–60°C at pH 5.1	42°C	PASS

Substrate Specificity	High specificity for β -D-glucose; <5% activity with other monosaccharides	Comparative activity assay with β -D-glucose, D-galactose, D-mannose, and D-fructose as substrates	Conforms	PASS
Moisture Content	$\leq 5.0\%$	Karl Fischer titration	3.2%	PASS
Endotoxin Level	≤ 10 EU/mg	Chromogenic LAL assay	<5 EU/mg	PASS

RELEASE AUTHORISATION

QC Status	RELEASED — Meets Enzovera Life Sciences specifications
Authorised By	Enzovera Quality Control Department
Issue Date	2026-05-14
Document Number	CoA-EV-OXR-002-LOT-PENDING

This Certificate of Analysis confirms that the above product lot meets Enzovera Life Sciences quality specifications at the time of manufacture. For technical assistance, contact techsupport@enzovera.com. For Research Use Only. Not for use in diagnostic procedures.