Datasheet

Product:
Flow-through biosensor B.LV5
Part#: 1.00101.2a.l

Construction:
2x Glucose, 2x Lactate and 2x Blank electrodes.
Interfaces to 1mm FFC ZIF connector.
Currently 0.15mm or 0.5mm inner diameter tube termination
Luer fittings

Operating principle:
Oxidase enzymes and hydrogen peroxide oxidation
@ Platinum @ +450 mV vs internal Ag/AgCl

Sensitivity @37°C:
Glucose: 0.8nA/mM (t90%~25s)
L-lactate: 2.0nA/mM (t90%~15s)

Dynamic range @37°C:
Glucose: <0.05mM - >25 mM
L-lactate: <0.02mM - >15 mM

Time to first analysis after storage:
~15min @ 37°C
Operational stability @37°C:
- Glucose and Lactate: >2 weeks continuous operation
- Glucose and Lactate: >4 weeks in analyzer mode
- Daily variation: <5% in sensitivity
- Decreased mainly by higher analyte concentration and less oxygen

Temperature influence:
- ~3.5% / °C

Interferences:
- Very low sensitivity to other substances - even to acetaminophen - further minimized due to difference measurement.

Storage:
- Desiccated @ 4°C – 28°C.
- Freezing not adverse. Humidity matters more than temperature.

Sterilization:
- Beta- or gamma radiation, 13 or 25 kGy typical
- Sensitivity increases upon irradiation, L-lactate sensor lifetime reduced
- Initial bioburden <1 cfu / device

Medium composition considerations:
- The used silver/silver chloride pseudo reference electrode relies on the presence and moderate variability of chloride ions.
- Linear range may be compromised by low concentration or “bulky” base of the buffer system.
- Typical HCO₃⁻ / CO₂ system is optimal. Worst is low concentration PBS.
- Acetate or imidazole based systems work well.

Disclaimer: Evaluation product for professionals to be used solely for research and development purposes! Not for medical and diagnostic use. Not to be used on humans. For more information contact IST AG.
Flow cell pressure drop:

~30 ml/min*bar

600µm x 300µm hemisphere = ~ 1.0µl

Performance

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