

IN CYTOTOX

LDHe

EXTRACELLULAR LACTATE DEHYDROGENASE



APPLICATIONS

Colorimetric assay for the quantification of membrane integrity and cellular viability in response to pharmaceutical, chemical and environmental compounds, and nutrients.

PRINCIPLE

Cytotoxicity or cell death is determined by the amount of membrane damage. The intracellular enzyme Lactate Dehydrogenase (LDH) is released rapidly from damaged cells into the cell culture supernatant. NADH consumption, measured kinetically in the cell supernatant, correlates with the amount of released LDH (LDHe). The cell viability is inversely proportional to the amount of released LDH.

Unlike some other LDHe assays, the In Cytotox LDHe assay measures the oxidation of NADH to NAD⁺ and the concurrent reduction of pyruvate to lactate. By providing an excess of pyruvate in the reaction mixture, the In Cytotox LDHe assay is therefore insensitive to pyruvate in the culture medium, which can cause product inhibition of the reverse reaction implemented in other LDHe assays.

BIOLOGICAL PARAMETERS EVALUATION

- IC₅₀ (Inhibitory Concentration 50%)
- Membrane integrity
- Cell viability

TECHNICAL SPECIFICATIONS

- Absorbance:** - 340 nm
- Approximate assay time:** - 35 min (1h 10 min if read at RT)
- Available kit configurations:**
- Reagents only
 - Reagents and 96-well microplates, sterile reagent reservoirs
- LDHE Kit content:**
- Reconstitution solution
 - Substrate solution
 - Activator solution
 - Instruction manual

LDHE KIT SIZES AND REFERENCE NUMBERS

REFERENCE NO.	NUMBER OF TESTS
AKLE96.300	300
AKLE96.1200	1200

**Kits with plasticware (microplates and reservoirs) are also available.
Individual reagents and other kit sizes available upon request.**

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