

**TECHNICAL DATA SHEET****Catalog # MSP31****Pyruvate dehydrogenase (PDH) Protein Quantity Dipstick Assay Kit**

Rev.3

LOT #:

APPLICATIONS: Analysis of pyruvate dehydrogenase (PDH) quantity

SPECIES CROSS-REACTIVITY: human, bovine, mouse, rat

KIT COMPONENTS:

Item	MSP31-30	MSP31-90
Dipsticks	30	90
Gold-conjugated antibody (dried in microplate wells)	30 wells	90 wells
Buffer A (Extraction buffer)	15 mL	45 mL
Buffer B (Blocking solution)	1 mL	3 mL
Buffer C (Wash buffer)	1 mL	3 mL

STORAGE CONDITIONS:

- Store dipsticks and microplate with gold-conjugated antibody at room temperature out of direct sunlight in their provided storage containers.
- Store Buffers A, B and C at 4°C or at -20°C for long-term storage.

COUNTRY OF ORIGIN: USA

**BACKGROUND:**

The pyruvate dehydrogenase complex (PDH) is at the center of aerobic carbohydrate metabolism. It is localized in the matrix space of mitochondria where it catalyzes the irreversible oxidative decarboxylation of pyruvate entering the organelle to produce acetyl-CoA, NADH and CO<sub>2</sub>.

PDH is a complex of three different enzymes that channel substrate and product. These are pyruvate dehydrogenase (E1), dihydrolipoamide transacetylase (E2) and dihydrolipoamide dehydrogenase (E3).

PDH deficiencies, diabetes, starvation, sepsis, and possibly Alzheimer's disease have been linked to altered PDH function.

**Note: This product is for research purposes only. It is not to be used in humans or for diagnostic purposes.**

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