

TECHNICAL DATA SHEET**Catalog # MSP18****Pyruvate Dehydrogenase (PDH) Enzyme Activity Microplate Assay Kit**

Rev. 5

LOT #:

APPLICATIONS: Quantitative analysis of PDH activity (pyruvate dehydrogenase)

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

KIT COMPONENTS:

Item	MSP18
20X Buffer	15 mL
Detergent	2 x 1 mL
20X Reagent Mix	2 x 0.6 mL
5X Stabilizer	13 mL
100X Coupler	0.25 mL
100X Reagent Dye	0.25 mL
96-well Microplate (12 strips)	1

STORAGE CONDITIONS: Store 20X Buffer, Detergent, and Microplate at 4°C.
Store 5X Stabilizer and 100X Reagent Dye at -20°C.
Store 20X Reagent Mix and 100X Coupler at -80°C.

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 CO₂.

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 functioning.

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

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