

## **Anti-PDH Subunit E1 alpha Monoclonal Antibody**

CATALOG #: 459400

COMPONENTS: 100 µg monoclonal antibody

**APPLICATIONS:** Western blotting and Immunocytochemistry

**CLONE ID OF MONOCLONAL** 

ANTIBODYV(mAb):

9H9AF5

SPECIES CROSS-REACTIVITY: human, bovine, mouse

HOST SPECIES AND ISOTYPE: Mouse IgG1, k

**IMMUNOGEN:** Human recombinant OSCP and PDH E1-α

CONCENTRATION: 1 mg/mL in HEPES-Buffered Saline (HBS) with 0.02% azide as a preservative.

SUGGESTED WORKING

CONCENTRATION:

1 μg/mL for Western blotting, 5 μg/mL for Immunocytochemistry

mAb PURITY: Near homogeneity as judged by SDS-PAGE. The antibody was produced in

vitro using hybridomas grown in serum-free medium, and then purified by

biochemical fractionation.

STORAGE CONDITIONS: Store at 4°C. Do not freeze.

**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 functioning.

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PI459400

(Rev 10/08) DCC-08-1089