

**TECHNICAL DATA SHEET****Catalog # MSP07****PDH subunit E1 alpha monoclonal antibody**

Rev.2

LOT #:

COMPONENTS: 100 µg monoclonal antibody

APPLICATIONS: Western blotting, Immunocytochemistry, Flow Cytometry

CLONE ID OF MONOCLONAL ANTIBODYV(mAb): 8D10E6

SPECIES CROSS-REACTIVITY: human, bovine, mouse, rat, *Drosophila melanogaster* and *C. elegans*

HOST SPECIES AND ISOTYPE: Mouse IgG1, k

IMMUNOGEN: Human PDH-E1-α

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

SUGGESTED WORKING CONCENTRATION: 0.5-1.0 µg/mL for Western blotting  
1 µg/mL for Immunocytochemistry  
1 µg/mL for Flow CytometrymAb 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.

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

WARRANTY – MitoSciences Inc warrants that products will perform as indicated in the published Product Information Sheet and Product Technical Specifications for 6 months from date of purchase when stored according to specifications and when used consistent with recommended protocols. If you experience results which materially differ from those described, send evidence of the non-performing product for replacement of the original product purchased or a credit toward any other of the company's products or services.