

**TECHNICAL DATA SHEET****Catalog # MSP01c****PDH Immunocapture monoclonal antibody**

Rev.0

**LOT #:****COMPONENTS:** 100 µg monoclonal antibody**APPLICATIONS:** Immunoprecipitation. Not recommended for Western blotting or Immunohistochemistry.**CLONE ID OF MONOCLONAL ANTIBODYV(mAb):** 15D3G9C11**SPECIES CROSS-REACTIVITY:** human and bovine**HOST SPECIES AND ISOTYPE:** Mouse IgG1, k**IMMUNOGEN:** Porcine heart PDH**CONCENTRATION:** 1 mg/mL in HEPES-Buffered Saline (HBS) with 0.02% azide as a preservative.**SUGGESTED WORKING CONCENTRATION:** 100 µg mAb can capture at least 5 µg PDH complex from 1 mg solubilized bovine heart mitochondria.**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.

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

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