

**TECHNICAL DATA SHEET****Catalog # MS416****Complex IV subunit VIIb monoclonal antibody**

Rev.0

<b>LOT #:</b>	
<b>COMPONENTS:</b>	250 µg monoclonal antibody
<b>APPLICATIONS:</b>	Western blotting
<b>CLONE ID OF MONOCLONAL ANTIBODY (mAb):</b>	2G7H8AD9
<b>SPECIES CROSS-REACTIVITY:</b>	bovine and rat (cross-reacts weakly with human and rat).
<b>HOST SPECIES AND ISOTYPE:</b>	Mouse IgG1, k
<b>IMMUNOGEN:</b>	Bovine Complex IV
<b>CONCENTRATION:</b>	1 mg/mL in HEPES-Buffered Saline (HBS) with 0.02% azide as preservative.
<b>SUGGESTED WORKING CONCENTRATION:</b>	25 µg/mL for Western blotting
<b>mAb PURITY:</b>	Near homogeneity as judged by SDS-PAGE. The antibody was produced <i>in vitro</i> using hybridomas grown in serum-free medium, and then purified by biochemical fractionation.
<b>STORAGE CONDITIONS:</b>	Store at 4°C. Do not freeze.
<b>COUNTRY OF ORIGIN:</b>	USA

**BACKGROUND:**

Complex IV, also called cytochrome *c* oxidoreductase or cytochrome *c* oxidase, is a complex of 13 different subunits, three of which (I, II and III) are encoded on mitochondrial DNA and the remainder in the nuclear DNA. The complex contains two heme groups (*a* and *a*<sub>3</sub>) and two copper atoms as prosthetic groups. Genetic alterations of this enzyme complex are a common cause of OXPHOS diseases and the enzyme is altered in patients with Alzheimer's disease. Also, there are reports of reduced amounts of this complex in hypoxic cancer cells.

**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.