



Anti-PDH Subunit E1 Alpha Monoclonal Antibody

CATALOG #:	456600
COMPONENTS:	100 µg monoclonal antibody
APPLICATIONS:	Western blotting, Immunocytochemistry
CLONE ID OF MONOCLONAL ANTIBODYV(mAb):	8D10E6
SPECIES CROSS-REACTIVITY:	human, bovine, mouse, rat, <i>Drosophila melanogaster</i> and <i>C. elegans</i>
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% sodium azide as a preservative.
SUGGESTED WORKING CONCENTRATION:	0.5-1.0 µg/mL for Western blotting
mAb PURITY:	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.
STORAGE CONDITIONS:	Store at 2-8°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 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.

www.invitrogen.com

Invitrogen Corporation • 542 Flynn Rd • Camarillo • CA 93012 • Tel: 800.955.6288 • E-mail: techsupport@invitrogen.com

PI456600

(Rev 10/08) DCC-09-0931

Important Licensing Information - These products may be covered by one or more Limited Use Label Licenses (see the Invitrogen Catalog or our website, www.invitrogen.com). By use of these products you accept the terms and conditions of all applicable Limited Use Label Licenses. Unless otherwise indicated, these products are for research use only and are not intended for human or animal diagnostic, therapeutic or commercial use.

Related Products

<i>Product</i>	<i>Conjugate</i>	<i>Cat. No.</i>
Protein A	Sepharose 4B	10-1041
rec-Protein G	Sepharose 4B	10-1241
ZyMAX™ Goat anti-rabbit IgG	Unconjugated	81-6100
ZyMAX™ Goat anti-mouse IgG	Unconjugated	81-6500

Secondary Antibody Conjugates

<i>Conjugate</i>	<i>Goat anti-rabbit IgG (H+L)</i>	<i>Goat anti-mouse IgG (H+L)</i>	<i>Ex/Em*</i>	<i>Fluorescence similar to--</i>
Alexa Fluor® 488	A11008	A11001	495/519	FITC
Alexa Fluor® 555	A21428	A21422	555/565	Cy3
Alexa Fluor® 594	A11012	A11005	590/617	Texas Red
Alexa Fluor® 647	A21244	A21235	650/668	Cy5
HRP	81-6120	81-6520	NA**	NA
AP	81-6122	81-6522	NA	NA
Biotin	B2770	B2763	NA	NA

*Excitation/emission (nm); **Not applicable

For additional secondary antibody conjugates, visit www.invitrogen.com/antibodies

For Research Use Only



Manufactured exclusively for Invitrogen by MitoSciences, Inc.

www.invitrogen.com

Invitrogen Corporation • 542 Flynn Rd • Camarillo • CA 93012 • Tel: 800.955.6288 • E-mail: techsupport@invitrogen.com

PI456600

(Rev 10/08) DCC-09-0931

Important Licensing Information - These products may be covered by one or more Limited Use Label Licenses (see the Invitrogen Catalog or our website, www.invitrogen.com). By use of these products you accept the terms and conditions of all applicable Limited Use Label Licenses. Unless otherwise indicated, these products are for research use only and are not intended for human or animal diagnostic, therapeutic or commercial use.