Anti-Complex I GRIM-19 Monoclonal Antibody

CATALOG #:	438900
COMPONENTS:	100 µg monoclonal antibody
APPLICATIONS:	Western blotting, Immunocytochemistry (heat-induced antigen-retrieval improves signal)
CLONE ID OF MONOCLONAL ANTIBODY (mAb):	6E1BH7
SPECIES CROSS-REACTIVITY:	human, bovine, mouse, rat
HOST SPECIES AND ISOTYPE:	Mouse IgG2b, k
IMMUNOGEN:	Full-length recombinant human GRIM-19
CONCENTRATION:	1 mg/mL in Hepes-Buffered Saline (HBS) with 0.02% sodium azide as a preservative.
SUGGESTED WORKING CONCENTRATION:	1 µg/mL for Western blotting, 1 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:

Complex I, or NADH ubiquinone oxidoreductase, is a large protein complex of 950,000 Da molecular weight made up by 45 to 46 different subunits. A total of seven of the subunits of the complex are encoded by mitochondrial DNA, while the remainder subunits are nuclear encoded, which are translated in the cytosol and translocated into the organelle for assembly at the inner membrane.

The enzyme complex catalyses electron entry from NADH via a flavin (FMN) and several non-heme iron centers. Complex I is sensitive to a wide range of inhibitors, many of which are pesticides or other common environmental toxins, such as rotenone. Complex I dysfunction is a common cause of genetic OXPHOS defects. Altered functioning of this complex is also thought to contribute to several neurological disorders including Parkinson's disease and schizophrenia. Also, there is evidence of Complex I involvement in diabetes.

Related Products

Product	*Conjugate*	*Cat. No.*
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

Conjugate	*Goat anti-rabbit IgG (H+L)*	*Goat anti-mouse IgG (H+L)*	*Ex/Em**	*Fluorescence similar to--*
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

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