

ENO2 Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO1744a**Specification****ENO2 Antibody - Product Information**

Application	WB, IHC, FC, E
Primary Accession	P09104
Reactivity	Human, Mouse
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	47.3kDa KDa

Description

This gene encodes one of the three enolase isoenzymes found in mammals. This isoenzyme, a homodimer, is found in mature neurons and cells of neuronal origin. A switch from alpha enolase to gamma enolase occurs in neural tissue during development in rats and primates.

Immunogen

Purified recombinant fragment of human ENO2 (AA: 251-433) expressed in E. Coli.

Formulation

Purified antibody in PBS with 0.05% sodium azide

ENO2 Antibody - Additional Information**Gene ID** 2026**Other Names**

Gamma-enolase, 4.2.1.11, 2-phospho-D-glycerate hydro-lyase, Enolase 2, Neural enolase, Neuron-specific enolase, NSE, ENO2

Dilution

WB~~1/500 - 1/2000
IHC~~1/200 - 1/1000
FC~~1/200 - 1/400
E~~1/10000

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

ENO2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

ENO2 Antibody - Protein Information

Name ENO2 ([HGNC:3353](#))

Function

Enolase that catalyzes the conversion of 2-phosphoglycerate to phosphoenolpyruvate in glycolysis and the reverse reaction in gluconeogenesis (By similarity). Has neurotrophic and neuroprotective properties on a broad spectrum of central nervous system (CNS) neurons. Binds, in a calcium-dependent manner, to cultured neocortical neurons and promotes cell survival (By similarity).

Cellular Location

Cytoplasm. Cell membrane. Note=Can translocate to the plasma membrane in either the homodimeric (alpha/alpha) or heterodimeric (alpha/gamma) form

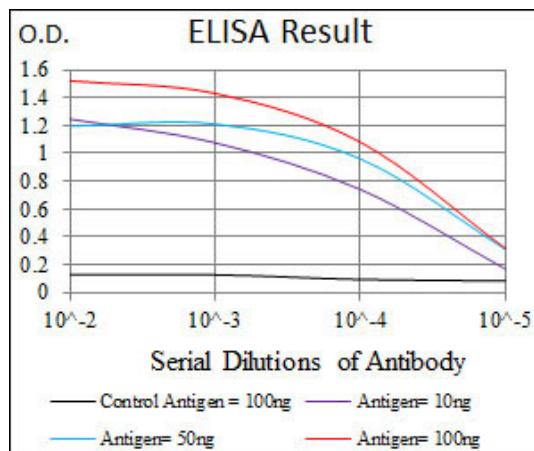
Tissue Location

The alpha/alpha homodimer is expressed in embryo and in most adult tissues. The alpha/beta heterodimer and the beta/beta homodimer are found in striated muscle, and the alpha/gamma heterodimer and the gamma/gamma homodimer in neurons

ENO2 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)



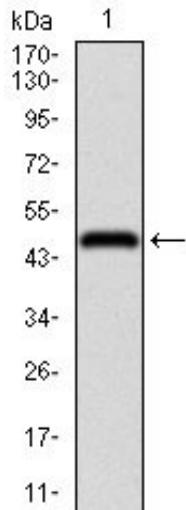


Figure 1: Western blot analysis using ENO2 mAb against human ENO2 recombinant protein. (Expected MW is 46 kDa)

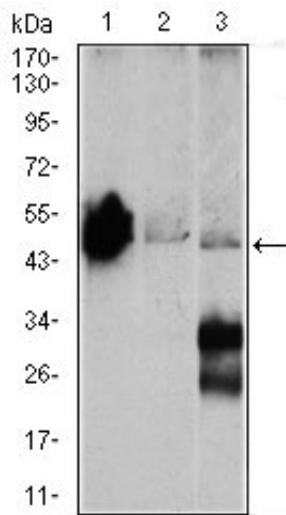


Figure 2: Western blot analysis using ENO2 mouse mAb against Mouse brain (1), NIH3T3 (2), and C6 (3) cell lysate.

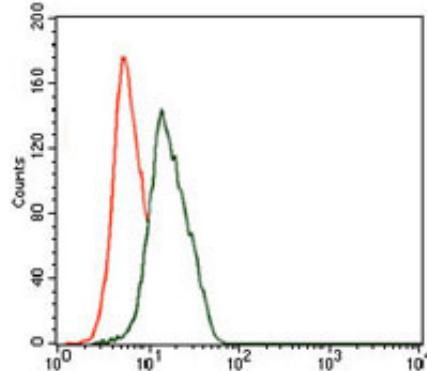


Figure 3: Flow cytometric analysis of HeLa cells using ENO2 mouse mAb (green) and negative control (red).

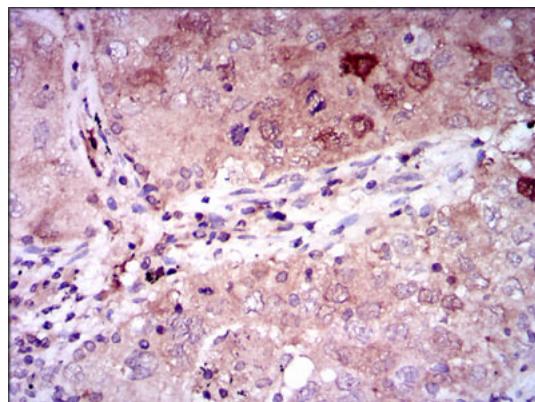


Figure 4: Immunohistochemical analysis of paraffin-embedded lung cancer tissues using ENO2 mouse mAb with DAB staining.

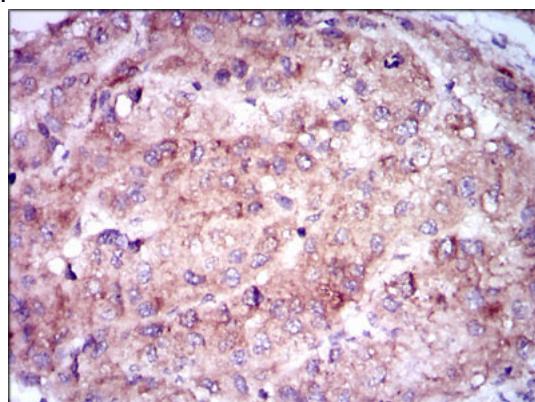


Figure 5: Immunohistochemical analysis of paraffin-embedded liver cancer tissues using ENO2 mouse mAb with DAB staining.

ENO2 Antibody - References

1. Neurology. 2011 Aug 16;77(7):623-30.
2. Lung Cancer. 2011 Feb;71(2):224-8.