

ENO1 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AW5166

Specification

ENO1 Antibody (Center) - Product Information

Application IF, FC, IHC-P, WB,E

Primary Accession P06733

Other Accession <u>P08734</u>, <u>P04764</u>, <u>P17182</u>, <u>Q4R5L2</u>, <u>P51913</u>,

Q9XSI4

Reactivity Human, Mouse

Predicted Bovine, Chicken, Monkey, Rat, Xenopus

Host Rabbit Clonality Polyclonal

Calculated MW H=47;M=47;Rat=47 KDa

Isotype Rabbit IgG
Antigen Source HUMAN

ENO1 Antibody (Center) - Additional Information

Gene ID 2023

Antigen Region

178-205

Other Names

ENO1; ENO1L1; MBPB1; MPB1; Alpha-enolase; 2-phospho-D-glycerate hydro-lyase; C-myc promoter-binding protein; Enolase 1; MBP-1; MPB-1; Non-neural enolase; Phosphopyruvate hydratase; Plasminogen-binding protein

Dilution

IF~~1:10~50 FC~~1:10~50 IHC-P~~1:10~50 WB~~1:1000

Target/Specificity

This ENO1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 178-205 amino acids from the Central region of human ENO1.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage

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

Precautions

ENO1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic



procedures.

ENO1 Antibody (Center) - Protein Information

Name ENO1

Synonyms ENO1L1, MBPB1, MPB1

Function

Glycolytic enzyme the catalyzes the conversion of 2- phosphoglycerate to phosphoenolpyruvate (PubMed:1369209, PubMed:29775581). In addition to glycolysis, involved in various processes such as growth control, hypoxia tolerance and allergic responses (PubMed:10802057, PubMed:12666133, PubMed:2005901, PubMed:29775581297755811266613312666133). Stimulates immunoglobulin production (PubMed:1369209).

Cellular Location

Cytoplasm. Cell membrane. Cytoplasm, myofibril, sarcomere, M line. Note=Can translocate to the plasma membrane in either the homodimeric (alpha/alpha) or heterodimeric (alpha/gamma) form. ENO1 is localized to the M line

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

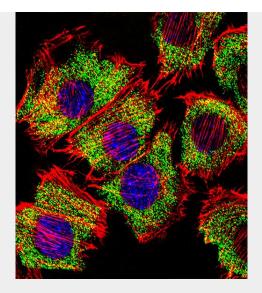
ENO1 Antibody (Center) - Protocols

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

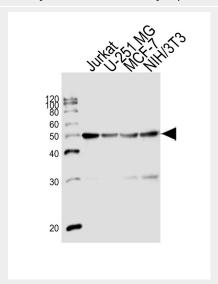
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

ENO1 Antibody (Center) - Images



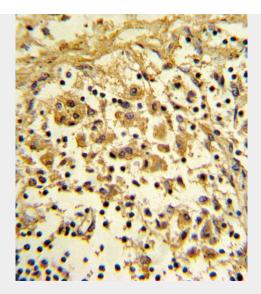


C2C12 ENO1 Fluorescent confocal image of cell stained with Antibody (Center)(Cat#AW5166).C2C12 cells were fixed with 4% PFA (20 min), permeabilized with Triton X-100 (0.1%, 10 min), then incubated with ENO1 primary antibody (1:25, 1 h at 37°C). For secondary antibody, Alexa Fluor® 488 conjugated donkey anti-rabbit antibody (green) was used (1:400, 50 min at 37°C).Cytoplasmic actin was counterstained with Alexa Fluor® 555 (red) conjugated Phalloidin (7units/ml, 1 h at 37°C). Nuclei were counterstained with DAPI (blue) (10 μg/ml, 10 min). ENO1 immunoreactivity is localized to Cytoplasm significantly.

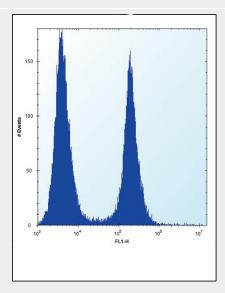


Western blot analysis of lysates from Jurkat,U-251 MG,MCF-7,mouse NIH/3T3 cell line (from left to right), using ENO1 Antibody (Center)(Cat. #AW5166). AW5166 was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody.Lysates at 20ug per lane.





Formalin-fixed and paraffin-embedded human lymph reacted with ENO1 Antibody (Center), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



ENO1 Antibody (Center) (Cat. #AW5166) flow cytometric analysis of Hela cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated donkey-anti-rabbit secondary antibodies were used for the analysis.

ENO1 Antibody (Center) - Background

ENO1 is one of three enolase isoenzymes found in mammals; it is alpha-enolase, a homodimeric soluble enzyme, and also a shorter monomeric structural lens protein, tau-crystallin. The two proteins are made from the same message. The full length protein, the isoenzyme, is found in the cytoplasm. The shorter protein is produced from an alternative translation start, is localized to the nucleus, and has been found to bind to an element in the c-myc promoter.

ENO1 Antibody (Center) - References

Cappello, P., Int. J. Cancer 125 (3), 639-648 (2009) Obermajer, N., Int. J. Biochem. Cell Biol. 41 (8-9), 1685-1696 (2009) Wygrecka, M., Blood 113 (22), 5588-5598 (2009)