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ENOA Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AW5148

Product Information

Application	IF, FC, WB
Primary Accession	P06733
Other Accession	Q4R5L2, Q9XSJ4
Reactivity	Human, Mouse, Rat
Predicted	Monkey, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	47169
Isotype	Rabbit IgG
Antigen Source	HUMAN

Additional Information

Gene ID	2023
Antigen Region	33-60
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 WB~~1:1000
Target/Specificity	This ENOA antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 33-60 amino acids from the N-terminal region of human ENOA.
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	ENOA Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

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:29775581). May also function in the intravascular and pericellular fibrinolytic system due to its ability to serve as a receptor and activator of plasminogen on the cell surface of several cell-types such as leukocytes and neurons (PubMed:12666133). 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

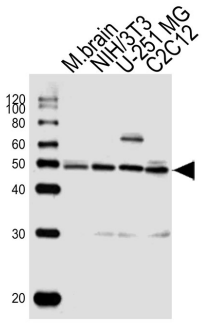
Background

ENO1 is one of three enolase isoenzymes found in mammals; the protein alpha-enolase, a homodimeric soluble enzyme, and is 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.

References

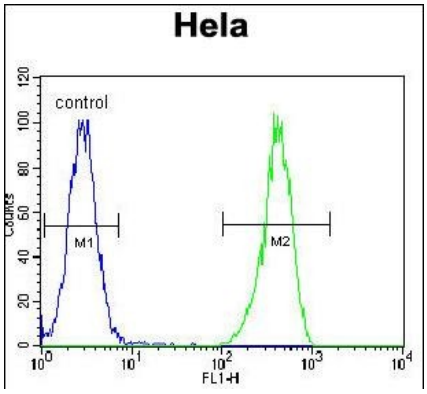
Cappello,P., Int. J. Cancer 125 (3), 639-648 (2009)
Wygrecka,M., Blood 113 (22), 5588-5598 (2009)

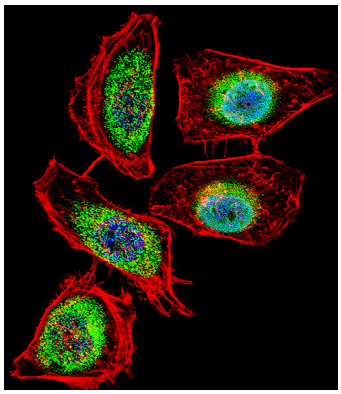
Images



Western blot analysis of lysates from mouse brain tissue,mouse NIH/3T3,U-251 MG,mouse C2C12 cell line (from left to right), using ENOA Antibody (N-term)(Cat. #AW5148). AW5148 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.

ENOA Antibody (N-term) (Cat. #AW5148) flow cytometric analysis of Hela cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.





Fluorescent confocal image of Hela cell stained with ENOA Antibody (N-term)(Cat#AW5148).Hela cells were fixed with 4% PFA (20 min), permeabilized with Triton X-100 (0.1%, 10 min), then incubated with ENOA primary antibody (1:25, 1 h at 37℃). For secondary antibody, Alexa Fluor® 488 conjugated donkey anti-rabbit antibody (green) was used (1:400, 50 min at 37℃).Cytoplasmic actin was counterstained with Alexa Fluor® 555 (red) conjugated Phalloidin (7units/ml, 1 h at 37℃). Nuclei were counterstained with DAPI (blue) (10 μg/ml, 10 min). ENOA immunoreactivity is localized to Cytoplasm and Nucleus significantly.