



ENOA Polyclonal Antibody

Catalog No	YP-Ab-07669
Isotype	IgG
Reactivity	Human;Rat;Mouse;
Applications	WB;ELISA
Gene Name	ENO1 ENO1L1 MBPB1 MPB1
Immunogen	Synthesized peptide derived from part region of human protein AA range: 120-170
Specificity	ENOA Polyclonal Antibody detects endogenous levels of protein.
Formulation	Liquid in PBS containing 50% glycerol, and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-2000 ELISA 1:5000-20000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	ENO1-IT1;ENO1L1;HEL-S-17;MPB1;NNE;PPH;HEL-S-279;NSE;GSD13;MSE;Eno-1;MBP-1;D6Ert375e;Eno-2;Eno-3;RNEN3;BBE;ENOA_HUMAN;ENO1;2-phospho-D-glycerate hydro-lyase;C-myc promoter-binding protein;Enolase 1;MPB-1;Non-neural enolase (NNE);Phosphopyruvate hydratase;Plasminogen-binding protein;4.2.1.11;MBPB1;ENOG_HUMAN;ENO2;Enolase 2;Neural enolase;Neuron-specific enolase (NSE);ENOB_HUMAN;ENO3;Enolase 3;Muscle-specific enolase (MSE);Skeletal muscle enolase;ENOA_MOUSE;ENOG_MOUSE;ENOB_MOUSE;ENOA_RAT;ENOG_RAT;ENOB_RAT;(alpha);ENO1 intronic transcript 1;ENO1 intronic transcript 1 (non-protein coding);alpha-enolase;ENOA;ENO1 ENO1L1 MBPB1 MPB1;Alpha-enolase (EC 4.2.1.11) (2-phospho-D-glycerate hydro-lyase) (C-myc promoter-binding protein) (Enolase 1) (MBP-1) (MPB-1) (Non-neural enolase) (NNE) (Phosphopyruvate hydratase) (Plasminogen-binding)
Observed Band	47kD
Calculated Molecular Weight	47kD
Cell Pathway	Cytoplasm . Cell membrane . Cytoplasm, myofibril, sarcomere, M line . Can translocate to the plasma membrane in either the homodimeric (alpha/alpha) or heterodimeric (alpha/gamma) form. ENO1 is localized to the M line.; [Isoform MBP-1]: Nucleus.



Tissue Specificity

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.

Function

catalytic activity: 2-phospho-D-glycerate = phosphoenolpyruvate + H₂O., cofactor: Magnesium. Required for catalysis and for stabilizing the dimer., developmental stage: During ontogenesis, there is a transition from the alpha/alpha homodimer to the alpha/beta heterodimer in striated muscle cells, and to the alpha/gamma heterodimer in nerve cells., disease: Antibodies against alpha-enolase are present in sera from patients with cancer-associated retinopathy syndrome (CAR), a progressive blinding disease which occurs in the presence of systemic tumor growth, primarily small-cell carcinoma of the lung and other malignancies., disease: ENO1 is identified as an autoantigen in Hashimoto encephalopathy (HE) a rare autoimmune disease associated with Hashimoto thyroiditis (HT). HT is a disorder in which destructive processes overcome the potential capacity of thyroid replacement leading to hypothyroidis

Background

enolase 1(ENO1) Homo sapiens This gene encodes alpha-enolase, one of three enolase isoenzymes found in mammals. Each isoenzyme is a homodimer composed of 2 alpha, 2 gamma, or 2 beta subunits, and functions as a glycolytic enzyme. Alpha-enolase in addition, functions as a structural lens protein (tau-crystallin) in the monomeric form. Alternative splicing of this gene results in a shorter isoform that has been shown to bind to the c-myc promoter and function as a tumor suppressor. Several pseudogenes have been identified, including one on the long arm of chromosome 1. Alpha-enolase has also been identified as an autoantigen in Hashimoto encephalopathy. [provided by RefSeq, Jan 2011],

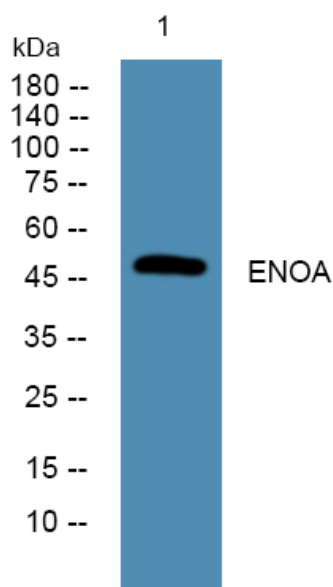
matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western blot analysis of lysates from PC12 cells, primary antibody was diluted at 1:1000, 4° over night