Product Name: **Enolase Rabbit Polyclonal Antibody**
Catalog #: **APRab10476**
For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,IHC,ICC/IF,ELISA
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:200-1:1000,ELISA 1:5000-1:20000
Molecular Weight	47kDa

Antigen Information

Gene Name	ENO2
Alternative Names	ENO2; Gamma-enolase; 2-phospho-D-glycerate hydro-lyase; Enolase 2; Neural enolase; Neuron-specific enolase; NSE
Gene ID	2026.0
SwissProt ID	P09104
Immunogen	The antiserum was produced against synthesized peptide derived from human NSE. AA range:371-420

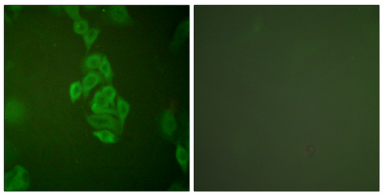
Background

enolase 2(ENO2) Homo sapiens 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. [provided by RefSeq, Jul 2008],catalytic activity:2-phospho-D-glycerate = phosphoenolpyruvate + H(2)O.,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.,function: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.,induction:Levels of ENO2 increase dramatically in cardiovascular accidents, cerebral trauma, brain tumors and Creutzfeldt-Jacob disease.,pathway:Carbohydrate degradation; glycolysis; pyruvate from D-glyceraldehyde 3-phosphate: step 4/5.,similarity:Belongs to the enolase family.,subcellular location:Can translocate to the plasma membrane in either the homodimeric (alpha/alpha) or heterodimeric (alpha/gamma) form.,subunit:Mammalian enolase is composed of 3 isozyme subunits, alpha, beta and gamma, which can form homodimers or heterodimers which are cell-type and development-specific.,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.,

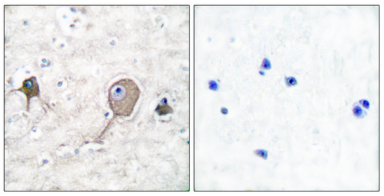
Research Area

Glycolysis / Gluconeogenesis;RNA degradation;

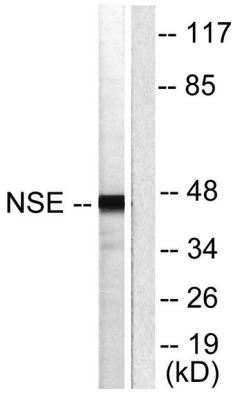
Image Data



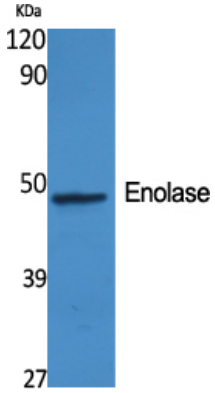
Immunofluorescence analysis of A549 cells, using NSE Antibody. The picture on the right is blocked with the synthesized peptide.



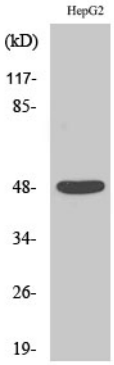
Immunohistochemistry analysis of paraffin-embedded human brain tissue, using NSE Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from HepG2 cells, using NSE Antibody. The lane on the right is blocked with the synthesized peptide.



Western Blot analysis of various cells using Enolase Polyclonal Antibody diluted at 1 : 2000



Western Blot analysis of HepG2 cells using Enolase Polyclonal Antibody diluted at 1 : 2000