

**Product Name: NSE(13E2)Mouse Monoclonal Antibody****Catalog #: AMM14910**

For research use only.

**Summary**

<b>Description</b>	Mouse monoclonal Antibody
<b>Host</b>	Mouse
<b>Application</b>	WB,IHC,ICC/IF
<b>Reactivity</b>	Human,Mouse,Rat
<b>Conjugation</b>	Unconjugated
<b>Modification</b>	Unmodified
<b>Isotype</b>	IgG
<b>Clonality</b>	Monoclonal
<b>Form</b>	Liquid
<b>Concentration</b>	1mg/ml
<b>Storage</b>	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
<b>Shipping</b>	Ice bags
<b>Buffer</b>	PBS, pH 7.4, containing 0.5%protective protein, 0.02% New type preservative N as Preservative and 50% Glycerol.
<b>Purification</b>	Affinity purification

**Application**

<b>Dilution Ratio</b>	WB 1:1000-1:2000,IHC 1:100-1:200,ICC/IF 1:100-1:200
<b>Molecular Weight</b>	47kDa

**Antigen Information**

<b>Gene Name</b>	ENO2
<b>Alternative Names</b>	ENO2; Gamma-enolase; 2-phospho-D-glycerate hydro-lyase; Enolase 2; Neural enolase; Neuron-specific enolase; NSE
<b>Gene ID</b>	2026.0
<b>SwissProt ID</b>	P09104
<b>Immunogen</b>	Synthetic Peptide of NSE

**Background**

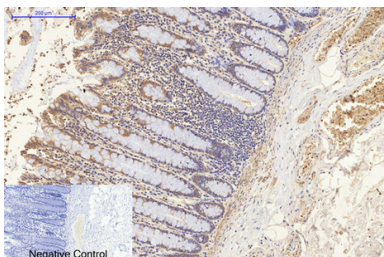
enolase 2(ENO2) Homo sapiens This gene encodes one of the three enolase isoenzymes found in mammals. This isoenzyme, a

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<sub>2</sub>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.,

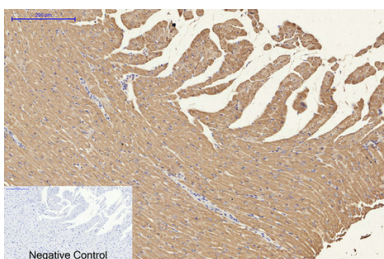
## Research Area

Glycolysis / Gluconeogenesis; RNA degradation;

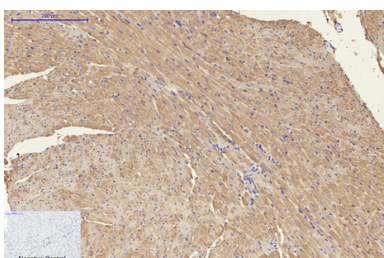
## Image Data



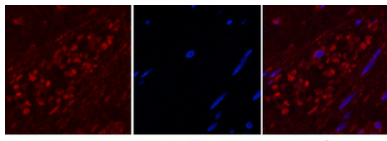
Immunohistochemical analysis of paraffin-embedded Human-colon tissue. 1, NSE Monoclonal Antibody (13E2) was diluted at 1:200 (4°C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98°C, 20min). 3, Secondary antibody was diluted at 1:200 (room temperature, 30min). Negative control was used by secondary antibody only.



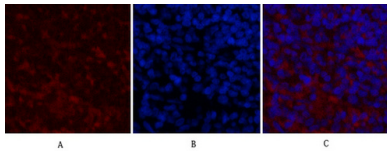
Immunohistochemical analysis of paraffin-embedded Rat-heart tissue. 1, NSE Monoclonal Antibody (13E2) was diluted at 1:200 (4°C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98°C, 20min). 3, Secondary antibody was diluted at 1:200 (room temperature, 30min). Negative control was used by secondary antibody only.



Immunohistochemical analysis of paraffin-embedded Mouse-heart tissue. 1, NSE Monoclonal Antibody (13E2) was diluted at 1:200 (4°C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98°C, 20min). 3, Secondary antibody was diluted at 1:200 (room temperature, 30min). Negative control was used by secondary antibody only.

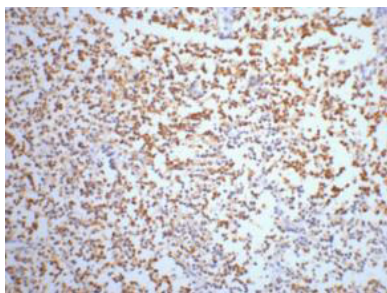
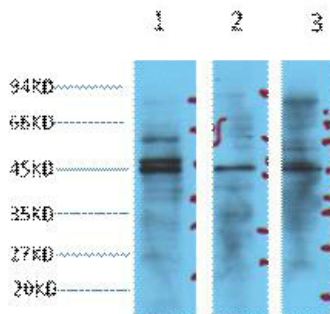


Immunofluorescence analysis of Human-appendix tissue. 1,NSE Monoclonal Antibody (13E2) (red) was diluted at 1:200 (4°C,overnight) . 2, Cy3 labled Secondary antibody was diluted at 1:300 (room temperature, 50min) .3, Picture B: DAPI (blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B

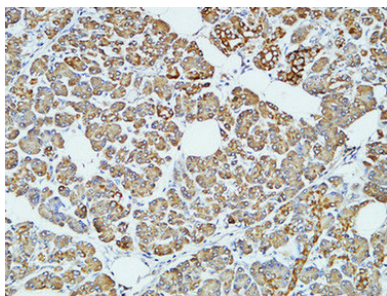


Immunofluorescence analysis of Mouse-spleen tissue. 1,NSE Monoclonal Antibody (13E2) (red) was diluted at 1:200 (4°C,overnight) . 2, Cy3 labled Secondary antibody was diluted at 1:300 (room temperature, 50min) .3, Picture B: DAPI (blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B

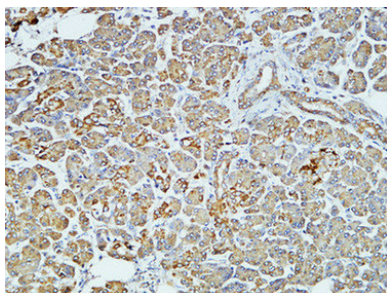
Western blot analysis of 1) Hela, 2) Jurkat, 3) 293T cell lysates, diluted at 1:3000.



IHC staining of Human small cell carcinoma of lung tissue, diluted at 1:200.



Immunohistochemical analysis of paraffin-embedded Human pancreas. 1, Antibody was diluted at 1:100 (4°,overnight) . 2, High-pressure and temperature EDTA, pH8.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200 (room temperature, 30min) .



Immunohistochemical analysis of paraffin-embedded Human pancreas. 1, Antibody was diluted at 1:100 (4°,overnight) . 2, High-pressure and temperature EDTA, pH8.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200 (room temperature, 30min) .