



NSE Monoclonal Antibody(13E2)

Catalog No	YP-Ab-03487
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;IF;IHC
Gene Name	ENO2
Protein Name	Gamma-enolase
Immunogen	Synthetic Peptide of NSE
Specificity	The antibody detects endogenous NSE proteins.
Formulation	PBS, pH 7.4, containing 0.5%BSA, 0.02% sodium azide as Preservative and 50% Glycerol.
Source	Monoclonal, Mouse
Purification	The antibody was affinity-purified from mouse ascites by affinity-chromatography using specific immunogen.
Dilution	WB: 1:2000 IHC: 1:200 IF 1:200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	ENO2; Gamma-enolase; 2-phospho-D-glycerate hydro-lyase; Enolase 2; Neural enolase; Neuron-specific enolase; NSE
Observed Band	47kD
Cell Pathway	Cytoplasm . Cell membrane . Can translocate to the plasma membrane in either the homodimeric (alpha/alpha) or heterodimeric (alpha/gamma) form. .
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 + 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



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],

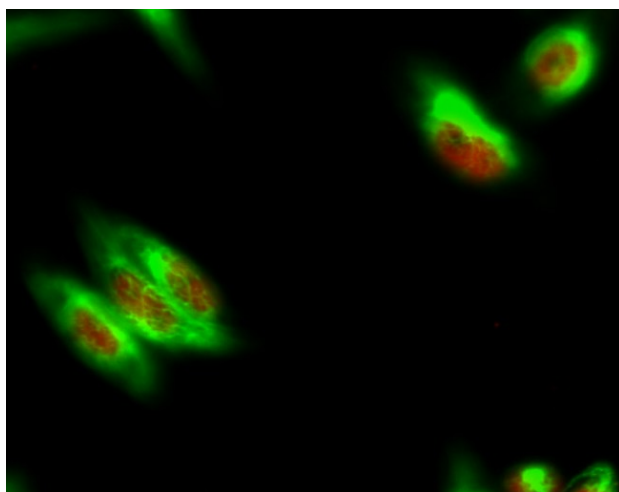
matters needing attention

Avoid repeated freezing and thawing!

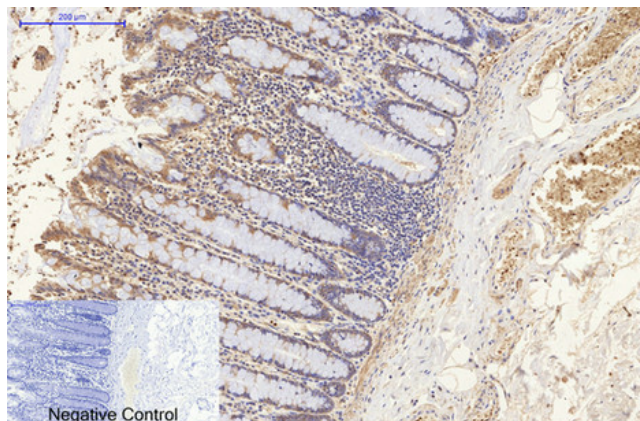
Usage suggestions

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

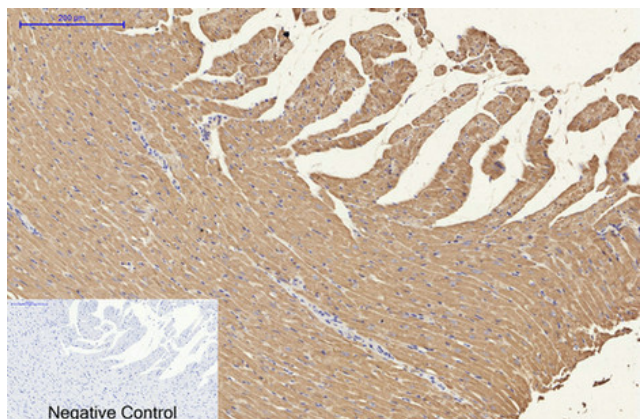
Products Images



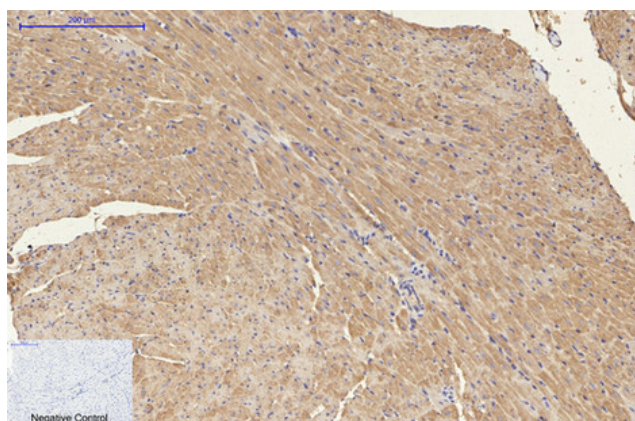
Immunofluorescence analysis of Hela cell. 1, Cdk2 Polyclonal Antibody (red) was diluted at 1:200 (4° overnight). NSE Monoclonal Antibody (13E2) (green) was diluted at 1:200 (4° overnight). 2, Goat Anti Rabbit Alexa Fluor 594 Catalog: RS3611 was diluted at 1:1000 (room temperature, 50min). Goat Anti Mouse Alexa Fluor 488 Catalog: RS3208 was diluted at 1:1000 (room temperature, 50min).



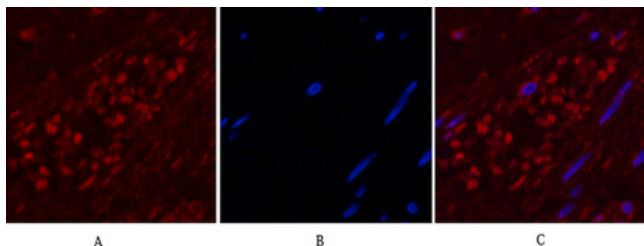
Immunohistochemical analysis of paraffin-embedded Human-colon tissue. 1, NSE Monoclonal Antibody (13E2) was diluted at 1:200 (4°C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98°C, 20min). 3, Secondary antibody was diluted at 1:200 (room temperature, 30min). Negative control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