

Product name:	NSE(13E2)Mouse Monoclonal Antibody
Cat number:	MABN14910
Conjugate:	Unconjugated
Size:	100µL
Clone:	Monoclonal
Concentration:	1mg/ml
Host:	Mouse
Isotype:	IgG
Immunogen:	Synthetic Peptide of NSE
Reactivity:	Human,Mouse,Rat
Applications:	WB 1:1000-1:2000,IHC 1:100-1:200,ICC/IF 1:100-1:200
Molecular Weight:	47kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	PBS, pH 7.4, containing 0.5%BSA, 0.02% New type preservative N as Preservative and 50% Glycerol.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

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 + 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.,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.,