

NSE Antibody (Y236)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP2780a

Product Information

Application	WB, IHC-P, E
Primary Accession	P09104
Other Accession	P07323 , P17183 , NP_001966
Reactivity	Human
Predicted	Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB16241
Calculated MW	47269
Antigen Region	213-239

Additional Information

Gene ID	2026
Other Names	Gamma-enolase, 2-phospho-D-glycerate hydro-lyase, Enolase 2, Neural enolase, Neuron-specific enolase, NSE, ENO2
Target/Specificity	This NSE antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 213-239 amino acids from human NSE.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	NSE Antibody (Y236) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	ENO2 (HGNC:3353)
Function	Enolase that catalyzes the conversion of 2-phosphoglycerate to phosphoenolpyruvate in glycolysis and the reverse reaction in gluconeogenesis (By similarity). 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 (By similarity).

Cellular Location

Cytoplasm. Cell membrane. Note=Can translocate to the plasma membrane in either the homodimeric (alpha/alpha) or heterodimeric (alpha/gamma) form

Tissue Location

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

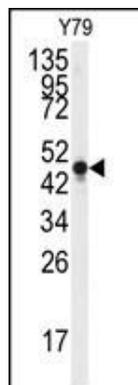
Background

NSE is 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.

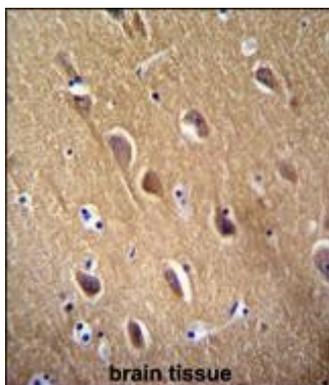
References

- Kotaska,K., Neuro Endocrinol. Lett. 28 (6), 761-764 (2007)
Forooghian,F., J. Clin. Immunol. 27 (4), 388-396 (2007)
Rech,T.H., Crit Care 10 (5), R133 (2006)
Oliva,D., Genomics 10 (1), 157-165 (1991)

Images



Western blot analysis of anti-NSE Antibody (Y236) (Cat.#AP2780a) in Y79 cell line lysates (35ug/lane). NSE (arrow) was detected using the purified Pab.



NSE Antibody (Y236) (Cat. #AP2780a)immunohistochemistry analysis in formalin fixed and paraffin embedded human brain tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of NSE Antibody (Y236) for immunohistochemistry. Clinical relevance has not been evaluated.