10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Phospho-NSE(Y236) Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP3589a

Product Information

Application	DB, 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

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 phosphopeptide corresponding to amino acid residues surrounding Y236 of human NSE.
Dilution	DB~~1:500 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	Phospho-NSE(Y236) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	ENO2
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 (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

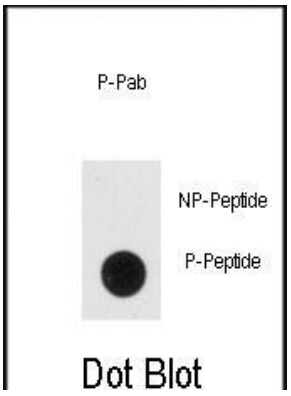
Background

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



Dot blot analysis of anti-Phospho-NSE-pY236 Antibody (Cat.#AP3589a) on nitrocellulose membrane. 50ng of Phospho-peptide or Non Phospho-peptide per dot were adsorbed. Antibody working concentrations are 0.5ug per ml.

Citations

- Axonal motor protein KIF5A and associated cargo deficits in multiple sclerosis lesional and normal-appearing white matter.
- Reduced axonal motor protein expression in non-lesional grey matter in multiple sclerosis.