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** | WB, 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** | WB~~1:1000 DB~~1:500 E~~Use at an assay dependent concentration. |
| **Format** | Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. 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 ( 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)

## Citations

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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.