

# NSE Antibody (Y25)

Affinity Purified Rabbit Polyclonal Antibody (Pab)  
Catalog # AP2780b

## Product Information

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<b>Application</b>	IHC-P-Leica, WB, E
<b>Primary Accession</b>	<a href="#">P09104</a>
<b>Other Accession</b>	<a href="#">P17183</a> , <a href="#">P04764</a> , <a href="#">P17182</a> , <a href="#">NP_001966</a>
<b>Reactivity</b>	Human, Rat, Mouse
<b>Predicted</b>	Rat
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	Rabbit IgG
<b>Clone Names</b>	RB16580
<b>Calculated MW</b>	47269
<b>Antigen Region</b>	6-32

## Additional Information

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<b>Gene ID</b>	2026
<b>Other Names</b>	Gamma-enolase, 2-phospho-D-glycerate hydro-lyase, Enolase 2, Neural enolase, Neuron-specific enolase, NSE, ENO2
<b>Target/Specificity</b>	This NSE antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 6-32 amino acids from human NSE.
<b>Dilution</b>	IHC-P-Leica~~1:500 WB~~1:1000 E~~Use at an assay dependent concentration.
<b>Format</b>	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.
<b>Storage</b>	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.
<b>Precautions</b>	NSE Antibody (Y25) is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

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<b>Name</b>	ENO2 ( <a href="#">HGNC:3353</a> )
<b>Function</b>	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

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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.

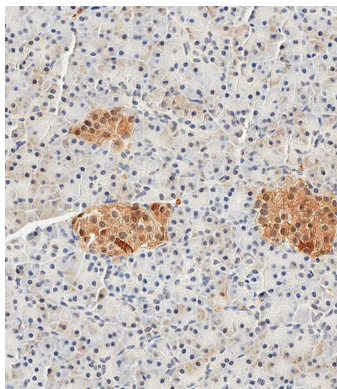
## References

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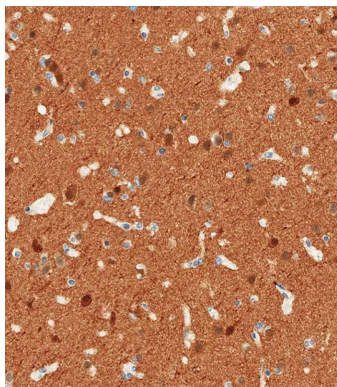
- Kotaska,K., Neuro Endocrinol. Lett. 28 (6), 761-764 (2007)  
Forooghian,F., J. Clin. Immunol. 27 (4), 388-396 (2007)  
Rech,T.H., Crit Care 10 (5), R133 (2006)  
Oliva,D., Genomics 10 (1), 157-165 (1991)

## Images

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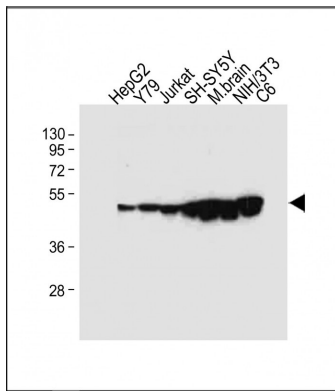


Immunohistochemical analysis of paraffin-embedded Human pancreas tissue using AP2780b performed on the Leica® BOND RXm. Tissue was fixed with formaldehyde at room temperature, antigen retrieval was by heat mediation with a EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:500) for 1 hours at room temperature. A undiluted biotinylated CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.



Immunohistochemical analysis of paraffin-embedded Human brain tissue using AP2780b performed on the Leica® BOND RXm. Tissue was fixed with formaldehyde at room temperature, antigen retrieval was by heat mediation with a EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:500) for 1 hours at room temperature. A undiluted biotinylated CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.

All lanes : Anti-NSE Antibody (Y25) at 1:4000 dilution Lane 1: HepG2 whole cell lysate Lane 2: Y79 whole cell lysate



Lane 3: Jurkat whole cell lysate Lane 4: SH-SY5Y whole cell lysate Lane 5: Mouse brain tissue lysate Lane 6: NIH/3T3 whole cell lysate Lane 7: C6 whole cell lysate  
Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 47 kDa Blocking/Dilution buffer: 5% NFDN/TBST.

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