

# **Rabbit Anti-NSE antibody**

### SL1027R

Product Name:	NSE
Chinese Name:	神经元特异性烯醇化酶/γ 烯醇化酶抗体
Alias:	Gamma-enolase; Gamma enolase; Neural enolase; Neuron specific enolase; neurone-specific enolase; 2 phospho D glycerate hydrolyase; Eno 2; Eno2; ENO2; ENOG; Enolase 2; Enolase 2 gamma neuronal; Enolase2; Neuron specific enolase; Neuron specific gamma enolase; NSE; ENOG_HUMAN; Gamma-enolase; 2-phospho-D-glycerate hydro-lyase; enolase 2, gamma, neuronal.
	<b>Specific References(4)</b>  SL1027R has been referenced in 4 publications.
	[IF=2.20]Wang, Nan, et al. "Myocardin-related transcription factor-A is key regulator in
	retinoic acid-induced neural-like differentiation of adult bone marrow-derived
	mesenchymal stem cells." Gene (2013).WB;Rat.
	PubMed:23541806
	[IF=1.57]LI, Guang-Zhou, and Feng TIAN. ?Guanine-Decorated Graphene
文献引用	Nanostructures for Sensitive Monitoring of Neuron-Specific Enolase Based on an
Pub Med	Enzyme-Free Electrocatalytic Reaction.? Analytical Sciences 29 (2013): 1195.other;
Ривчмеа	PubMed:24334987
	[IF=2.94]Zhang, Shuai-nan, et al. "Cerebral potential biomarkers discovery and
	metabolic pathways analysis of α-synucleinopathies and the dual effects of
	Acanthopanax senticosus Harms on central nervous system through metabolomics
	analysis." Journal of ethnopharmacology (2015). WB; Mouse.
	PubMed:25660332
	[IF=3.44]Huang, Xiaopeng, et al. "A novel reverse fluorescent immunoassay approach
	for sensing human chorionic gonadotropin based on silver-gold nano-alloy and magnetic

	nanoparticles." Analytical and bioanalytical chemistry (2015): 1-9.other;
	PubMed:26547191
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Chicken, Dog, Cow,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-
	Cyt=1µg/Test IF=1:100-500 (Paraffin sections need antigen repair)
	not yet tested in other applications.
	optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	48kDa
Cellular localization:	cytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human NSE:201-300/434
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized
Storage:	antibody is stable at room temperature for at least one month and for greater than a year
Storage.	when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of
	antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	<u>PubMed</u>
	This gene encodes one of the three enclase isoenzymes found in mammals. This isoenzyme, a homodimer, is found in mature neurons and cells of neuronal origin. A switch from alpha enclase to gamma enclase occurs in neural tissue during development in rats and primates. [provided by RefSeq, Jul 2008].
	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.
Product Detail:	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.
	Subcellular Location: Cytoplasm. Cell membrane. Can translocate to the plasma membrane in either the homodimeric (alpha/alpha) or heterodimeric (alpha/gamma) form.
	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.

Similarity:

Belongs to the enolase family.

SWISS: P09104

Gene ID: 2026

#### Database links:

Entrez Gene: 2026Human

Entrez Gene: 13807Mouse

Entrez Gene: 24334Rat

Omim: 131360Human

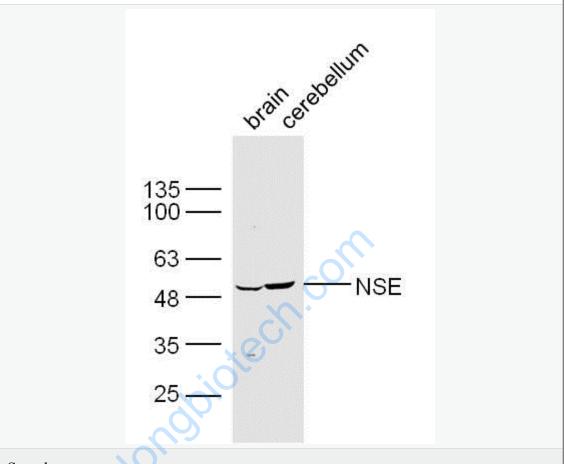
SwissProt: P09104Human SwissProt: P17183Mouse SwissProt: P07323Rat

Unigene: 511915Human

#### **Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

神经元特异性烯醇化酶(NSE)存在于神经元细胞和神经内分泌组织中,起源于神经内分泌细胞的Tumour可产生过量的NSE。NSE也是小细胞肺癌的检测指标,70%左右的小细胞肺癌患者血中NSE升高,而其他组织型肺癌NSE升高的患者仅为10%~20%。



Picture:

Sample:

Brain (Mouse) Lysate at 30 ug

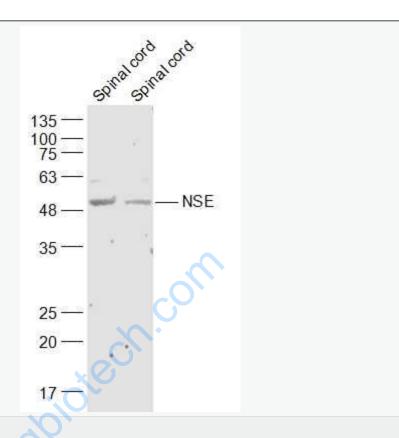
Cerebellum (Mouse) Lysate at 30 ug

Primary: Anti-NSE (SL1027R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 48 kD

Observed band size: 49kD



## Sample:

Spinal cord (Mouse) Lysate at 40 ug

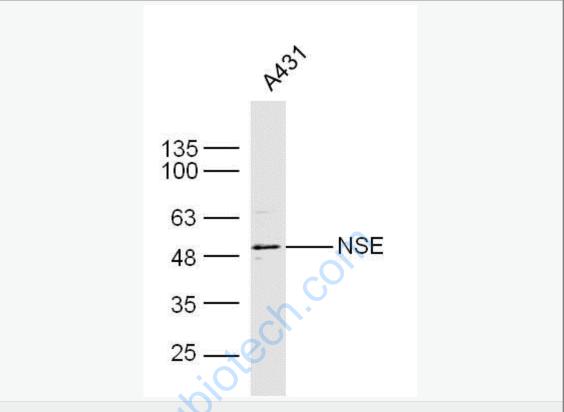
Spinal cord (Rat) Lysate at 40 ug

Primary: Anti-NSE (SL1027R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 48 kD

Observed band size: 48 kD



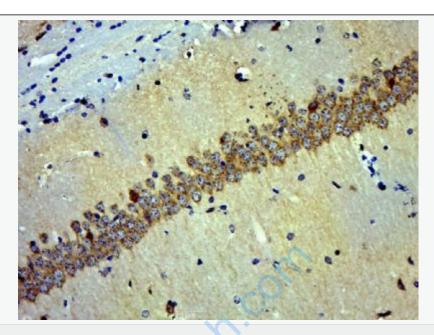
Sample: A431 Cell Lysate at 40 ug

Primary: Anti- NSE (SL1027R) at 1/300 dilution

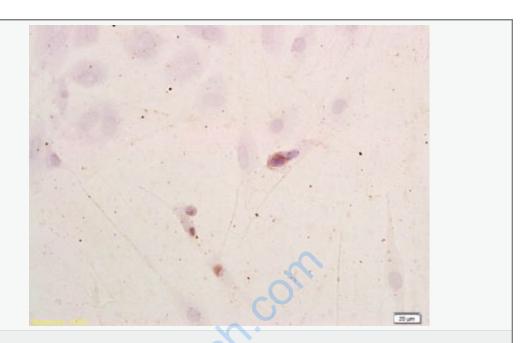
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 48 kD

Observed band size: 48 kD



Paraformaldehyde-fixed, paraffin embedded (Rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (NSE) Polyclonal Antibody, Unconjugated (SL1027R) at 1:500 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.

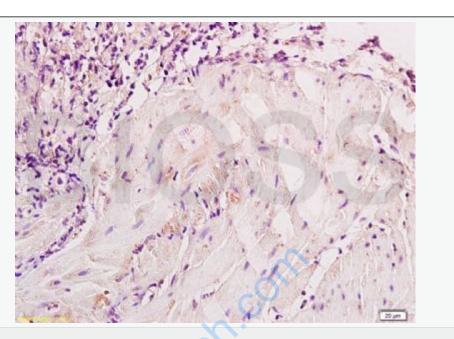


Tissue/cell: Neuroblastoma cells;

Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min;

Incubation: Anti-NSE/ENO2/γ Enolase Polyclonal Antibody,

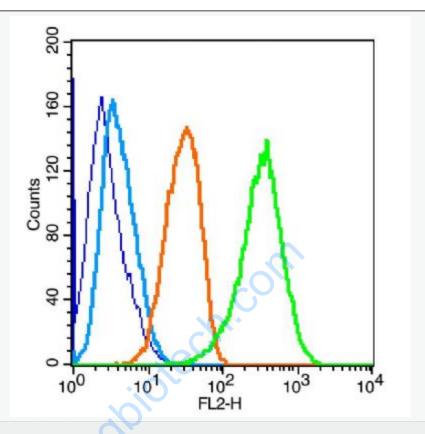
Unconjugated(SL1027R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Tissue/cell: dog bladder tissue; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer ( 0.01M, pH 6.0 ), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-NSE/ENO2/γ Enolase Polyclonal Antibody,

Unconjugated(SL1027R) 1:800, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Blank control: U-87MG(blue).

Primary Antibody:Rabbit Anti-NSE antibody(SL1027R), Dilution: 1 $\mu$ g in 100  $\mu$ L 1X PBS containing 0.5% BSA;

Isotype Control Antibody: Rabbit IgG(orange) ,used under the same conditions ); Secondary Antibody: Goat anti-rabbit IgG-PE(white blue), Dilution: 1:200 in 1 X PBS containing 0.5% BSA.

#### Protocol

The cells were fixed with 2% paraformaldehyde (10 min), then permeabilized with 90% ice-cold methanol for 30 min on ice. Primary antibody (SL1027R) were incubated for 30 min on the ice, followed by 1 X PBS containing 0.5% BSA + 1 0% goat serum (15 min) to block non-specific protein-protein interactions. Then the Goat Anti-rabbit IgG/PE antibody was added into the blocking buffer mentioned

above to react with the primary antibody at 1/200 dilution for 30 min on ice.
Acquisition of 20,000 events was performed.

