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

Anti-NSE (Neuron specific enolase) Antibody

Our Anti-NSE (Neuron specific enolase) primary antibody from PhosphoSolutions is rabbit polyclonal.

Catalog # AN1498

Specification

Anti-NSE (Neuron specific enolase) Antibody - Product Information

Application	**WB, IHC**
Primary Accession	P09104
Reactivity	**Bovine, Chicken, Drosophila**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Calculated MW	**47269**

Anti-NSE (Neuron specific enolase) Antibody - Additional Information

Gene ID **2026**

Other Names

2 phospho D glycerate hydrolyase antibody, 2-phospho-D-glycerate hydro-lyase antibody, Eno 2 antibody, ENO2 antibody, ENOG antibody, ENOG_HUMAN antibody, Enolase 2 (gamma, neuronal) antibody, Enolase 2 antibody, Enolase 2 gamma neuronal antibody, Enolase2 antibody, Epididymis secretory protein Li 279 antibody, Gamma enolase antibody, Gamma-enolase antibody, HEL S 279 antibody, Neural enolase antibody, Neuron specific enolase antibody, Neuron specific gamma enolase antibody, Neuron-specific enolase antibody, neuronal enriched enolase antibody, Neurone specific enolase antibody, NSE antibody

Target/Specificity

Neuron specific enolase (NSE) is an enzyme which catalyzes the conversion of 2-phosphoglycerate to phosphoenolpyruvate in the glycolytic pathway, and also the reverse reaction in gluconeogenesis. It is one of three mammalian enolases, which are also known as ENO1, ENO2, and ENO3 or alternately as enolase alpha, beta and gamma. The three enolases have different cell type specific expression patterns, so that antibodies to them are useful cell type specific markers.(MacAlesse et al., 1988). NSE corresponds to ENO2 or enolase gamma and is heavily expressed in neuronal cells. ENO1 is also known as enolase alpha and as non-neuronal enolase. The third enolase, ENO3 or enolase beta, is expressed in muscle cells. Since neurons require a great deal of energy, they are very rich in glycolytic enzymes such a GAPDH and NSE. Antibodies to this protein are therefore useful to identify neuronal cell bodies, developing neuronal lineage and neuroendocrine cells. Release of NSE from damaged neurons into CSF and blood has also been used as a biomarker of neuronal injury (2).

Dilution

WB~~1:1000
IHC~~1:100~500

Format

Neat Serum

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small

aliquots to prevent freeze-thaw cycles.

Precautions
Anti-NSE (Neuron specific enolase) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

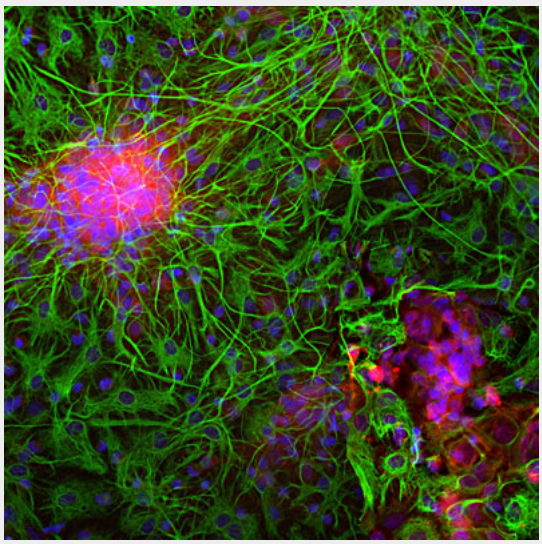
Shipping
Blue Ice

Anti-NSE (Neuron specific enolase) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-NSE (Neuron specific enolase) Antibody - Images



Immunolabeling of E20 rat mixed neuron and glial cultured cells labeled with anti-neuron specific enolase antibody (cat. 1520-NSE, red, 1:500) and anti-GFAP antibody (cat. 621-GFAP, green, 1:5000). The blue is Hoechst stain of nuclear DNA. Anti-NSE labels protein expressed in neuronal cells and anti-GFAP labels protein expressed in intermediate filaments in astrocytic and other glial cells.

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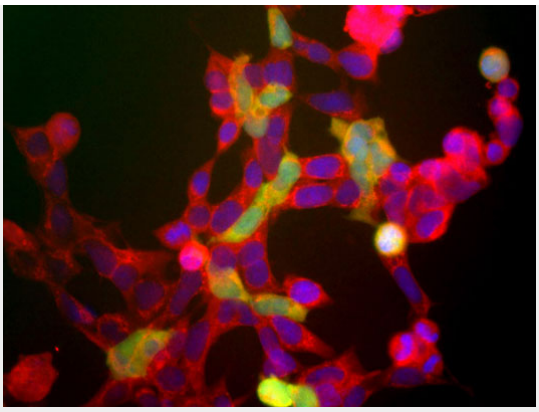
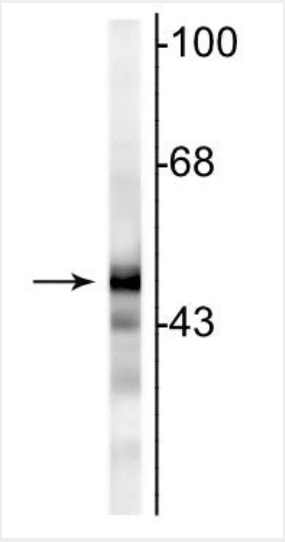


Immunolabeling of HEK 293 cells labeled with anti-neuron specific enolase antibody (cat. 1520-NSE, red, 1:500) and anti-UCHL1 antibody (cat. 2060-UCHL1, green, 1:500).



Western blot of rat cortical lysate showing specific immunolabeling of the ~47 kDa NSE protein.

Anti-NSE (Neuron specific enolase) Antibody - Background

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