# **PRODUCT INFORMATION**

Catalog number ATGA0273

Clone No. AT17D10

**Product type** Monoclonal Antibody

**UnitProt No.** P09104

NCBI Accession No. NP\_001966

### **Alternative Names**

Enolase 2 (gamma, neuronal), ENO2, NSE, Neuron-Specific Enolase, 2 phospho D glycerate hydrolyase, Eno 2, ENOG, Enolase 2 gamma neuronal, Enolase2, Gamma enolase, Neural enolase, Neuron specific enolase, Neuron specific gamma enolase, Neurone specific enolase.

# **PRODUCT SPECIFICATION**

# **Antibody Host**

Mouse

Reacts With Human

**Concentration** 1mg/ml (determined by BCA assay)

### Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) with 0.02% Sodium Azide, 10% glycerol

### Immunogen

Recombinant human NSE (1-434aa) purified from E. coli

### Isotype

IgG2b kappa

# **Purification Note**

By protein-A affinity chromatography

# Application

ELISA, WB, ICC/IF

### Usage

The antibody has been tested by ELISA, Western blot analysis to assure specificity and reactivity. Since application varies, however, each investigation should be titrated by the reagent to obtain optimal results. Recommended dilution range for Western blot analysis is  $1:500 \sim 1:5000$ . Recommended starting dilution is

#### 1:1000.

#### Storage

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

### BACKGROUND

#### Description

Neuron-specific enolase (NSE) is a glycolytic isoenzyme which is located in central and peripheral neurons and neuroendocrine cells. This enzyme is released into the CSF when neural tissue is injured. Neoplasms derived from neural or neuroendocrine tissue may release NSE into the blood. NSE is a useful substance that has been detected in patients with certain tumors, namely: neuroblastoma, small cell lung cancer, medullary thyroid cancer, carcinoid tumors, pancreatic endocrine tumors, and melanoma.

#### **General References**

Oliva D, Cali L, Feo S, Giallongo A (1991). Genomics 10 (1): 157-65. Craig SP, Day IN, Thompson RJ, Craig IW (1991). Cytogenet. Cell Genet. 54 (1-2): 71-3. McAleese SM, Dunbar B, Fothergill JE, et al. (1989). Eur. J. Biochem. 178 (2): 413-7.

### DATA

### Western blot analysis (WB)



The extracts of mouse brain (40ug) were resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human NSE antibody (1:500  $\sim$  1:5000). Proteins were visualized using a goat antimouse secondary antibody conjugated to HRP and an ECL detection system.

The Cell lysates (5ug) were resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human NSE antibody (1:1000). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system. Lane 1.: 293T cell lysate Lane 2.: NSE Transfected 293T cell lysate NKMAXBiO We support you, we believe in your research Human Enolase 2/ENO2 antibody Catalog Number: ATGA0273



The Cell lysates (20ug) were resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human NSE antibody (1:1000). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system. Lane 1.: U-87 MG cell lysate Lane 2.: Jurkat cell lysate

The recombinant proteins (50ng) were resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human NSE antibody (1:1000). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system. Lane 1.: Recombinant protein ENO1 Lane 2.: Recombinant protein NSE (ENO2) Lane 3.: Recombinant protein ENO3

# Immunocytochemistry/Immunofluorescence (ICC/IF)



ICC/IF analysis of NSE in U87MG cells line, stained with DAPI (Blue) for nucleus staining and monoclonal anti-human NSE antibody (1:100) with goat anti-mouse IgG-Alexa fluor 488 conjugate (Green).