

For Research Use Only

# NSE Monoclonal antibody

Catalog Number: 66150-1-Ig

Featured Product

26 Publications



## Basic Information

Catalog Number:

66150-1-Ig

Size:

150ul, Concentration: 2093 ug/ml by 2026  
Nanodrop and 1000 ug/ml by Bradford  
method using BSA as the standard;

Source:

Mouse

Isotype:

IgG1

Immunogen Catalog Number:

AG19106

GenBank Accession Number:

BC002745

GeneID (NCBI):

2026

UNIPROT ID:

P09104

Full Name:

enolase 2 (gamma, neuronal)

Calculated MW:

47 kDa

Observed MW:

47 kDa

Purification Method:

Protein G purification

CloneNo.:

6F8G3

Recommended Dilutions:

WB: 1:5000-1:50000

IHC: 1:2500-1:10000

IF-P: 1:200-1:800

FC (Intra): 0.20 ug per 10<sup>6</sup> cells in a  
100 µl suspension

## Applications

Tested Applications:

WB, IHC, IF-P, FC (Intra), ELISA

Cited Applications:

WB, IHC, IF

Species Specificity:

human, mouse, rat, pig

Cited Species:

human, mouse, rat

**Note-IHC: suggested antigen retrieval with  
TE buffer pH 9.0; (\*) Alternatively, antigen  
retrieval may be performed with citrate  
buffer pH 6.0**

Positive Controls:

WB: PC-12 cells, C6 cells, fetal human brain tissue,  
HEK-293 cells, Neuro-2a cells, pig brain tissue, rat  
brain tissue, SH-SY5Y cells, U-251 cells, pig cerebellum  
tissue, rat cerebellum tissue, mouse brain tissue,  
mouse cerebellum tissue

IHC: mouse brain tissue, human brain tissue, rat brain  
tissue, rat cerebellum tissue

IF-P: mouse brain tissue,

FC (Intra): SH-SY5Y cells,

## Background Information

NSE, also named as ENO2, belongs to the enolase family. Enolases are cytoplasmic glycolytic enzymes that may be involved in differentiation. The enolase has three isoenzymes, alpha, beta and gamma. The alpha form is expressed in most tissues, whereas the beta form is expressed in muscle tissue. The gamma enolase (ENO2), a homodimer, is primarily localized in neurons and neuroendocrine cells and is a cancer diagnostic marker for brain tumors (PMID:7520111). ENO2 plays a role in the glycolysis-related energy pathway and might be involved in higher metabolic activity during the day than at night, at least in part.

## Notable Publications

Author	Pubmed ID	Journal	Application
Rongkun Li	34836938	Cell Death Dis	WB
Huan Liu	36377337	Brain Behav	IF
Jiaren Pan	36419844	Dis Markers	WB,IHC

## Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

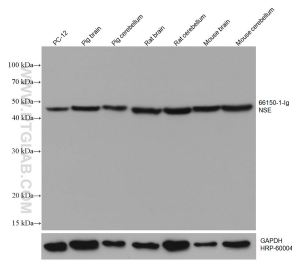
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free  
in USA), or 1(312) 455-8498 (outside USA)

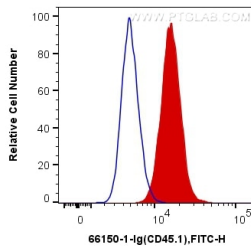
E: proteintech@ptglab.com  
W: ptglab.com

This product is exclusively available under Proteintech  
Group brand and is not available to purchase from any  
other manufacturer.

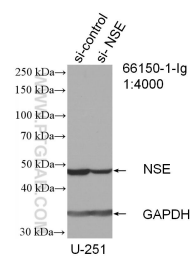
## Selected Validation Data



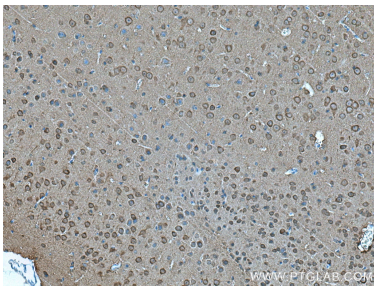
Various lysates were subjected to SDS PAGE followed by western blot with 66150-1-Ig (NSE antibody) at dilution of 1:50000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated GAPDH Monoclonal antibody (HRP-60004) as loading control.



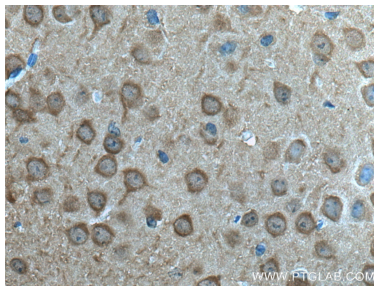
1X10<sup>6</sup> 5H-SY5Y cells were intracellularly stained with 0.2  $\mu$ g Anti-Human NSE (66150-1-Ig, Clone:6F8G3) and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG (H+L) at dilution 1:1000 (red), or 0.2  $\mu$ g Control Antibody. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



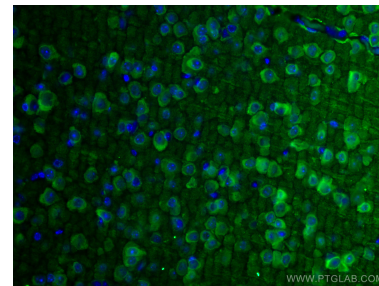
WB result of NSE antibody (66150-1-Ig; 1:4000; incubated at room temperature for 1.5 hours) with sh-Control and sh-NSE transfected U-251 cells.



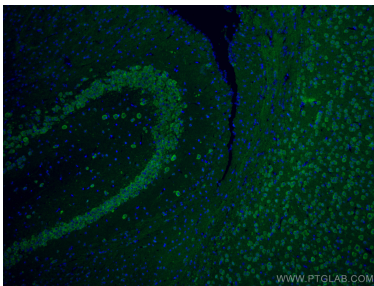
Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 66150-1-Ig (NSE antibody) at dilution of 1:5000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 66150-1-Ig (NSE antibody) at dilution of 1:5000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed mouse brain tissue using NSE antibody (66150-1-Ig, Clone: 6F8G3) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



Immunofluorescent analysis of (4% PFA) fixed mouse brain tissue using NSE antibody (66150-1-Ig, Clone: 6F8G3) at dilution of 1:400 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



Immunohistochemical analysis of paraffin-embedded rat brain tissue slide using 66150-1-Ig (NSE antibody) at dilution of 1:10000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).