# **Product Datasheet**

# Enolase 2/Neuron-specific Enolase Antibody NB110-58870SS

Unit Size: 0.025 ml

Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.



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Updated 4/13/2025 v.20.1

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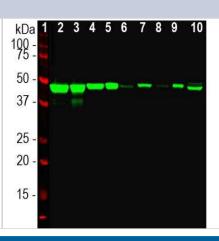
# NB110-58870SS

Enolase 2/Neuron-specific Enolase Antibody

	5
Product Information	
Unit Size	0.025 ml
Concentration	This product is unpurified. The exact concentration of antibody is not quantifiable.
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.035% Sodium Azide
Isotype	IgG
Purity	Unpurified
Buffer	Supplied as serum
Target Molecular Weight	47 kDa
Product Description	
Host	Rabbit
Gene ID	2026
Gene Symbol	ENO2
Species	Human, Mouse, Rat
Marker	Neuronal Marker
Immunogen	Recombinant full length human NSE purified from E. coli. [UniProt# P09104]
Product Application Details	
Applications	Western Blot, Simple Western, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Knockdown Validated
Recommended Dilutions	Western Blot 1:2000, Simple Western 1:10000, Immunohistochemistry 1:500, Immunocytochemistry/ Immunofluorescence 1:500, Knockdown Validated
Application Notes	This NSE antibody is useful for Immunocytochemistry/Immunofluorescence and Western Blot.
	In Simple Western only 10 - 15 uL of the recommended dilution is used per data point. See <u>Simple Western Antibody Database</u> for Simple Western validation: Tested in Human Brain lysate 0.05 mg/mL, separated by Size, antibody dilution of

#### Images

Western Blot: Enolase 2/Neuron-specific Enolase Antibody [NB110-58870] - Analysis of different tissue and cell lysates using rabbit pAb to neuron specific enolase (NSE), NB110-58870, dilution 1:5,000 in green: [1] protein standard (red), [2] rat brain, [3] rat spinal cord, [4] mouse brain, [5] mouse spinal cord, [6] NIH-3T3, [7] HEK293, [8] HeLa, [9] SH-SY5Y, and [10] C6 cells. A single band at about 47kDa corresponds to the NSE protein, seen only in extracts containing neurons ro neuronal lineage cells.





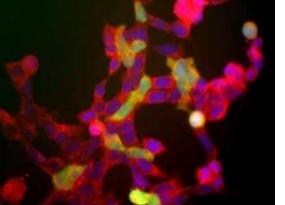
1:10,000. Separated by Size-Wes, Sally Sue/Peggy Sue.

Immunocytochemistry/Immunofluorescence: Enolase 2/Neuron-specific Enolase Antibody [NB110-58870] - Analysis of mixed cortical neuronglial cell culture from E20 rat stained with rabbit pAb to neuron specific enolase (NSE), NB110-58870, dilution 1:500 in red, and costained with chicken pAb to GFAP, dilution 1:5,000 in green. The blue is Hoechst staining of nuclear DNA. the NSE antibody labels protein expressed in neuronal cells, while the GFAP antibody stains intermediate filaments in astrocytic and certain other glial cells.

Western Blot: Enolase 2/Neuron-specific Enolase Antibody [NB110-58870] - Blot of rat spinal cord probed with rabbit antibody to NSE. The antibody stains a single sharp band corresponing to NSE at about 47kDa.

Western Blot: Enolase 2/Neuron-specific Enolase Antibody [NB110-58870] - Western blot analysis of extracts from mouse brain using NSE antibody (NB110-58870, 1:100).

Immunocytochemistry/Immunofluorescence: Enolase 2/Neuron-specific Enolase Antibody [NB110-58870] - Shows the human embryonic kidney cells line 293, which express many neuronal proteins (1). The red channel shows staining which recognizes all of these 293 cells. The green channels shows staining for another neuronal marker to UCHL1 using NB110-58869. This neuronal gene is apparently activated in a cell density dependent fashion and at this stage only a few cells express this protein. However all cells that express NSE also express UCHL1.

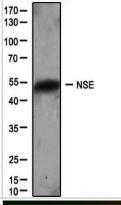


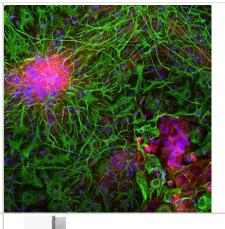




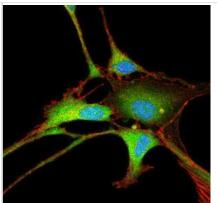


~47kDa >-

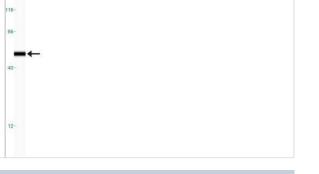




Immunocytochemistry/Immunofluorescence: Enolase 2/Neuron-specific Enolase Antibody [NB110-58870] - Confocal immunofluorescent analysis of 3T3 cells using NSE antibody (NB110-58870, 1:5). An Alexa Fluor 488 -conjugated Goat to rabbit IgG was used as secondary antibody (green, A). Actin filaments were labeled with Alexa Fluor 568 phalloidin (red, B). DAPI was used to stain the cell nuclei (blue, C).



Simple Western: Enolase 2/Neuron-specific Enolase Antibody [NB110-58870] - Simple Western lane view shows a specific band for Enolase 2/ Neuron specific enolase in 0.05 mg/ml of Human Brain lysate. This experiment was performed under reducing conditions using the 12-230 kDa separation system.



#### **Publications**

Powers RM, Daza R, Koehler AE et al. Growth cone macropinocytosis of neurotrophin receptor and neuritogenesis are regulated by neuron navigator 1 Molecular biology of the cell 2022-06-01 [PMID: 35352947] (ICC/IF, Human)

Details:

Dilution used for ICC 1:250

Niture S, Tricoli L, Qi Q Et al. MicroRNA miR-99b-5p Targets mTOR/AR axis, Induces Autophagy, and Inhibits Prostate Cancer Cell Proliferation Tumour Biol 2022-07-11 [PMID: 35811549]

Gong W, Zhang S, Zong Y et al. hiPS Cell-Derived Neurons for High-Throughput Screening Methods Mol. Biol. 2019-05-25 [PMID: 31124122] (ICC/IF, Human)

Modarai S, Gupta A, Opdenaker L et al. The anti-cancer effect of retinoic acid signaling in CRC occurs via decreased growth of ALDH+ colon cancer stem cells and increased differentiation of stem cells Otolaryngol Head Neck Surg 2018-10-16 [PMID: 30410666] (WB, Human)

Jung Y, Cackowski FC, Yumoto K, Decker A. CXCL12gamma Promotes Development of Metastatic Castration Resistant Prostate Cancer by Induction of Cancer Stem Cell and Neuroendocrine Phenotypes. Cancer Res. 2018-02-05 [PMID: 29431639] (WB, Human)





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#### Limitations

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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