For Research Use Only.
Not for use in diagnostic procedures.

MBL
A JSR Life Sciences Company

POLYCLONAL ANTIBODY

Anti-Neuron-specific enolase (NSE) pAb

Code No.	Quantity	Form
PD002-H	6 mL	Ready for use

BACKGROUND: Enolase is a soluble protein, which consists of homo/hetero dimmer of α, β and γ subunits. The αγ and γγ enolases are called as neuron-specific enolase (NSE) or γ-enolase, because they present at high level in central nervous tissue and at low level in various other tissues, especially in neurons and neuroendocrine cells. NSE is also known as tumor marker, because some of brain, lung and other cancers express and secret it at high level.

SOURCE: This antibody was purified from rabbit serum using affinity column. The rabbit was immunized with purified human brain NSE.

FORMULATION: 6 mL volume of pre-diluted antibody in 20 mM HEPES, containing 135 mM NaCl, 1% BSA and 0.09% NaN_3.
*Azide may react with copper or lead in plumbing system to form explosive metal azides. Therefore, always flush plenty of water when disposing materials containing azide into drain.

STORAGE: This antibody solution is stable for 3 years from the date of manufacture when stored at 4°C.

REACTIVITY: This antibody reacts with human, mouse and rat NSE on Immunohistochemistry.

APPLICATION:
Immunohistochemistry; Ready for use.
This antibody can be used for staining of frozen sections and paraffin sections.

Detailed procedure is provided in the following **PROTOCOL**.

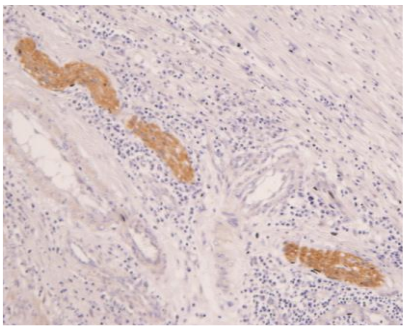
SPECIES CROSS REACTIVITY:

Species	Human	Mouse*	Rat*
Tissues	Pancreas, intestine, colon, stomach		Brain
Reactivity on IHC	+	+	+

*Information from the licencer.

INTENDED USE:
For Research Use Only. Not for use in diagnostic procedures.

REFERENCES:
1) Hayashi, Y., *et al*., *J. Histochem. Cytochem*. **37**, 1147-1152 (1989)
2) Haimoto, H., *et al*., *Lab. Invest.* **52**, 257-263 (1985)
3) Kato, K., *et al*., *Clin. Chim. Acta.* **127**, 353-363 (1983)
4) Kato, K., *et al*., *J. Neurochem* **37**, 998-1005 (1981)



Immunohistochemical detection of NSE on human colon paraffin embedded section with PD002-H.

The descriptions of the following protocols are examples.
Each user should determine the appropriate condition.

PROTOCOL:
Immunohistochemical staining for paraffin-embedded sections: SAB method

1) Deparaffinize the sections with Xylene 3 times for 3 minutes each.
2) Wash the slides with Ethanol 3 times for 3 minutes each.
3) Wash the slides 3 times in PBS for 3 minutes each.
4) Remove the slides from PBS and cover each section with 3% H_2O_2 for 10 minutes at room temperature to block endogenous peroxidase activity. Wash twice in PBS for 5 minutes each.
5) Remove the slides from PBS, wipe gently around each section and cover tissues with blocking buffer (20 mM HEPES, 1% BSA, 135 mM NaCl) for 5 minutes to block non-specific staining. Do not wash.
6) Tip off the blocking buffer, wipe gently around each section and cover tissues with anti-NSE monoclonal antibody (ready for use).
7) Incubate the sections for 1 hour at room temperature.
8) Wash the slides twice in PBS for 5 minutes each.
9) Wipe gently around each section and cover tissues with Histostar™ (Ms + Rb) for Human tissue (MBL; code no. 8460). Incubate for 30 minutes at room temperature. Wash as in step 8).

10) Visualize by reacting for 5 minutes with Histostar™ DAB Substrate Solution (MBL; code no. 8469). *DAB is a suspect carcinogen and must be handled with care. Always wear gloves.
11) Wash the slides in water for 5 minutes.
12) Counter stain in hematoxylin for 1 minute, wash the slides 3 times in water for 5 minutes each, and then immerse the slides in PBS for 5 minutes. Dehydrate by immersing in Ethanol 3 times for 3 minutes each, followed by immersing in Xylene 3 times for 3 minutes each.
13) Now ready for mounting.